

# Factors associated with psychoactive substance use among professional truck drivers

*Fatores associados ao uso de substâncias psicoativas entre motoristas profissionais de caminhão*  
*Factores relacionados al uso de psicotrpicos entre motoristas profesionales de camión*

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## ABSTRACT

**Objectives:** to identify factors associated with the use of psychoactive substances among professional truck drivers. **Methods:** cross-sectional study that investigated the use of at least one psychoactive substance and its association with sociodemographic, occupational, and health characteristics in 354 professional truck drivers. Researchers collected data through face-to-face interviews using forms. Multiple regression analyzes estimated prevalence ratios (PR) and respective 95% confidence intervals (95%CI). **Results:** lower family income (PR: 2.03; 95%CI: 1.08-3.83), symptoms of insomnia (PR: 2.18, 95%CI: 1.46-3.26), and long working hours (PR: 1.95, 95%CI: 1.30-2.92) independently associated with the use of at least one psychoactive substance. **Conclusions:** a set of sociodemographic, occupational, and health variables acts at distinct levels and is independently associated with the use of psychoactive substances among professional truck drivers.

**Descriptors:** Illicit Drugs; Motor Vehicles; Occupational Health Nursing; Occupational Health; Cross-Sectional Studies.

## RESUMO

**Objetivos:** identificar fatores associados ao uso de substâncias psicoativas entre motoristas profissionais de caminhão. **Métodos:** estudo transversal que investigou o uso de pelo menos uma substância psicoativa e sua associação com características sociodemográficas, ocupacionais e de saúde em 354 motoristas profissionais de caminhão. A coleta se baseou em entrevistas face a face com uso de formulários. Análises de regressão múltipla estimaram razões de prevalência (RP) e respectivos intervalos de 95% de confiança (IC95%). **Resultados:** menor renda familiar (RP: 2,03; IC95%: 1,08-3,83), sintomas de insônia (RP: 2,18; IC95%: 1,46-3,26) e jornada de trabalho longa (RP: 1,95; IC95%: 1,30-2,92) se associaram de forma independente ao uso de pelo menos uma substância psicoativa. **Conclusões:** um conjunto de variáveis sociodemográficas, ocupacionais e de saúde atua em diferentes níveis e se associa de forma independente ao uso de substâncias psicoativas entre motoristas profissionais de caminhão.

**Descritores:** Drogas Ilícitas; Veículos Automotores; Enfermagem do Trabalho; Saúde do Trabalhador; Estudos Transversais.

## RESUMEN

**Objetivos:** identificar factores relacionados al uso de psicotrpicos entre motoristas profesionales de camión. **Métodos:** estudio transversal que investigó el uso de por lo menos un psicotrpicico y su relación con características sociodemográficas, ocupacionales y de salud en 354 motoristas profesionales de camión. La recolecta se basó en entrevistas frente a frente con uso de formularios. Análisis de regresión múltiple estimaron razones de prevalencia (RP) y respectivos intervalos de 95% de confianza (IC95%). **Resultados:** menor renta familiar (RP: 2,03; IC95%: 1,08-3,83), síntomas de insomnio (RP: 2,18; IC95%: 1,46-3,26) y jornada de trabajo larga (RP: 1,95; IC95%: 1,30-2,92) se relacionaron de manera independiente al uso de por lo menos un psicotrpicico. **Conclusiones:** un conjunto de variables sociodemográficas, ocupacionales y de salud actúa en diferentes niveles y se relaciona de manera independiente al uso de psicotrpicicos entre motoristas profesionales de camión.

**Descriptorios:** Drogas Ilícitas; Vehículos a Motor; Enfermería del Trabajo; Salud Laboral; Estudios Transversales.

## INTRODUCTION

The use of alcoholic beverages or other psychoactive drugs before or while driving a motor vehicle is a risk factor for accidents, injuries, and traffic deaths, which the World Health Organization (WHO) considers a severe public health problem in the world<sup>(1)</sup>. Professional truck drivers, particularly in Brazil, are vulnerable to traffic accidents due to poor road conditions and long working hours. Thus, it is an asset for observing potential risk factors that are reflected in physical and mental health conditions<sup>(2)</sup>, in the lifestyle and labor activity of this particular group of workers<sup>(3-4)</sup>.

The National Confederation of Transport of Brazil<sup>(5)</sup> estimates that about 60% of cargo displacement in the country occurs through road transport which, to a substantial extent, is conducted by truckers. In this respect, such professionals have effective participation in the Brazilian economy and connect an expressive part of the national territory through the land transport of cargo<sup>(4)</sup>. This fact characterizes them as a mobile occupational group, subject to large displacements and irregular work schedules<sup>(6)</sup> so that these factors can cooperate both for the deterioration of the general state of your health<sup>(7)</sup> as for the use of substances that stimulate their state of alert<sup>(2,6)</sup>.

A study conducted in Minas Gerais showed that, of the 114 drivers interviewed, 15% used amphetamines, and, among these, 41% used it daily. For this group, the main reason reported for using was pressure from the company — referred to by 35% of users. The study also showed that the principal place for substance acquisition was in fuel stations<sup>(8)</sup>. More recently, 32.9% of truckers declared that they had already used “rebite,” popular name of products composed of amphetamines<sup>(3)</sup>.

The National Infrastructure Department highlighted that approximately 93 thousand cargo vehicles were involved in traffic accidents between 2007 and 2018, corresponding to 28% of total road accidents<sup>(9)</sup>. The road transport of cargo and the profession of a truck driver are among the 20 activities with the most deaths during professional practice<sup>(10)</sup>. Despite the high number of fatal accidents at work, surveillance actions in the sector represented only 1.4% of the total in the investigated period<sup>(9)</sup>. Faced with the reality experienced by professional drivers, in 2015, Law N° 13,103 was decreed, which provides for the exercise of the profession of companies and autonomous cargo carriers drivers, disciplining the working day and time of vehicular driving<sup>(11)</sup>. Some authors report that the misuse of psychoactive substances is still a practice present in the work process of professional drivers<sup>(12)</sup>. Even after the implementation of Law N° 13,103/2015 and Ordinance 116/2015 of the Ministry of Labor<sup>(11,13)</sup>, which provides for toxicological examinations for this class of workers, the reduction in the use of psychoactive substances has not yet been significant<sup>(12,14)</sup>.

Publications in the area have enormously contributed to the use and abuse of psychoactive substances being recognized as a public health problem<sup>(15-16)</sup>. However, little has been discussed about the factors potentially associated with this behavior among professional drivers. Knowing the relationships between sociodemographic, occupational, and health factors and the use of substances in this professional group becomes a relevant and urgent task about the protection of the physical and mental health of such workers<sup>(10)</sup>, especially for the systematization of the practice of occupational nurses.

## OBJECTIVES

To identify factors associated with the use of at least one psychoactive substance among professional truck drivers.

## METHODS

### Ethical aspects

The Research Ethics Committee of the Anna Nery School of Nursing/Hospital São Francisco de Assis of the Federal University of Rio de Janeiro approved the study, according to resolution n° 466/2012 of the Ministry of Health. All participants signed an Informed Consent Form.

### Design, period, and place of study

This is a cross-sectional study guided by the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) recommendations and held between January and June 2016. The place of data collection was a tax station located on the Presidente Dutra highway, specifically in the section that comprises the State of Rio de Janeiro, Brazil. It is the biggest tax station in the State and conducts, on average, nine thousand monthly approaches.

### Population and sample: criteria of inclusion and exclusion

Drivers with a license in categories C and E of the National Driver's license and who remained at the tax station to verify the vehicle and tax documents were considered eligible. The sample calculation considered a confidence level of 95%, sampling error of 5%, prevalence of 30% of occurrence of the outcome<sup>(3,17)</sup> and population of nine thousand monthly approaches, thus estimating a sample of 312 individuals. The final sample included 354 male drivers selected by convenience sampling. Drivers who passed through the tax barrier and were detained and referred to the Federal Police were not part of the sample.

### Collection procedures and study variables

Trained professionals conducted face-to-face interviews to collect data. The application of the questionnaire, which did not undergo any validation process, took place in a reserved area of the tax station without the presence or interruption of third parties.

The professionals used a multidimensional questionnaire that assessed the following groups of variables as exposure factors: (i) sociodemographic – age (in complete years, categorized according to the median value of the distribution), marital status, education, self-reported race/color, children under six years of age, per capita income, religion; (ii) occupational – job satisfaction, type of relationship, working time in the profession (in years, categorized according to the median value of the distribution), number of working hours/day, number of hours of rest/day, hours driving uninterruptedly (categorized according to the median value of the distribution); (iii) health-related-smoking, self-assessment of health and the presence of complaints of insomnia. The latter was evaluated based on three questions (“had difficulty falling asleep;” “woke up during sleep and had difficulty falling asleep again;” and “woke up

before the desired time and could not fall asleep again") extracted from a population-based study since they evaluate the frequency of complaints about nighttime sleep in the last two weeks of the study<sup>(18)</sup> and are widely used in studies with national samples<sup>(19-22)</sup>. All these questions presented four categories of response ("always," "almost always," "sometimes," and "rarely or never"). Individuals who answered "always" or "almost always" to at least one of the three questions were classified as having insomnia complaints.

Finally, the presence of common mental disorders (CMD) was evaluated according to the Brazilian version of the Self-Reporting Questionnaire (SRQ-20). It is an instrument recommended by the World Health Organization<sup>(23)</sup> for screening of non-psychotic mental disorders composed of 20 "yes/no" questions, validated for the Brazilian population<sup>(24)</sup> and with sensitivity and specificity ranging from 62.9 to 90% and 44 to 95%, respectively<sup>(25)</sup>. The sum of the questions that make up the SRQ-20 generated a continuous variable categorized into two levels (presence of CMD/absence of CMD) and had as cutoff point five or more items answered positively<sup>(24,26)</sup>.

The outcome variable was the pattern of alcohol, amphetamine and cocaine use assessed by the Alcohol, Smoking and Substance Involvement Screening Test - ASSIST<sup>(27)</sup>. This instrument has been translated and validated into Brazilian Portuguese<sup>(28)</sup>, which assesses the pattern of psychoactive substance use over the past three months. The sum of six of the eight items that make up the instrument generated scores that were later categorized into low-risk use or risk use, according to the recommendation for use of ASSIST. In the case of cocaine and amphetamine, this classification was based on the following cut-off points: low-risk use (from 0 to 3 points) and risky use ( $\geq 4$  points). The cut-off points for alcohol differ from the points for other substances: low-risk use (from 0 to 10 points) and risky use ( $\geq 11$  points)<sup>(28)</sup>. For the analyses, the risk of use of at least one of the substances described above was considered as an outcome of interest.

### Data processing and analysis

The descriptive analyses of the sociodemographic, occupational and health characteristics of the participants were based on the number of observations (n) and percentages (%) for the categorical variables and on means and standard deviation for

the continuous variables. The bivariate analyses, which included only categorical variables, were based on Pearson's chi-square test. The reference category was defined as the one with the lowest expected risk for the use of psychoactive substances. Finally, Poisson regression with robust variance was adopted for the multivariate analysis with the estimate of the prevalence ratio and respective 95% confidence intervals (95% CI).

The analyses were conducted in two stages. The bivariate models evaluated the association between each exposure variable and the outcome of interest. The variables that presented  $p < 0.20$  in the bivariate analyses were included in the multivariate models, in which only the variables with  $p \leq 0.05$  per method backward. The quality of fit of multivariate models was evaluated by the measures of *deviance*, Akaike (AIC), and Bayesian (BIC) information criteria. IBM SPSS (IBM Statistical Package for Social Sciences, v. 23.0) performed all analyses.

## RESULTS

The group studied included 354 truck drivers with a mean age of 42.7 years ( $\pm 9.4$  years) and a range from 21 to 74 years. Most part of participants were married (81.4%) and had only elementary education (62.4%). The most frequently reported monthly per capita income was equal to or less than one minimum wage. Regarding self-declared skin color, 44.9% were white, 42.9% were brown, and 10.5% were black. The average time of work in the profession was 16.8 years ( $\pm 10.3$  years), and 70.3% were submitted to the work regime of the Consolidation of Brazilian Labor Laws (CLT). Study participants drove uninterrupted for an average of 5.3 hours/day ( $\pm 2.5$  hours). The daily working hours was, on average, 13 hours ( $\pm 3.4$  hours), and the average number of hours of rest was 6.3 hours/day ( $\pm 1.7$  hours). Regarding substance use, 66% had moderate to elevated risk for alcohol use, 26% for amphetamine use, and 13% had moderate to elevated risk for cocaine or crack use. The prevalence of risky use of at least one psychoactive substance was 23.4%.

Tables 1, 2, and 3 present the results regarding the bivariate analyses between sociodemographic, occupational, and health characteristics and risky use of at least one psychoactive substance in the last three months.

**Table 1** - Characterization of the risky use of at least one psychoactive substance in the last three months according to sociodemographic variables among professional truck drivers, Rio de Janeiro, Brazil, 2016

Variables	Risky use of at least one substance		p*
	Yes n (%)	No n (%)	
Age			
Up to 42 years	51 (27.1)	137 (72.9)	0.082
43 years or older	32 (19.3)	134 (80.7)	
Schooling			
Primary	51 (23.1)	170 (76.9)	0.833
Middle/bachelor	32 (24.1)	101 (75.9)	
Live with partner			
Yes	63 (21.9)	225 (78.1)	0.145
No	20 (30.3)	46 (69.7)	
Skin color (n = 348)			
Black/brown	43 (22.8)	146 (77.2)	0.909
White	37 (23.3)	122 (76.7)	

To be continued

Table 1 (concluded)

Variables	Risky use of at least one substance		p*
	Yes n (%)	No n (%)	
Children < 6 years			
Yes	75 (23.6)	243 (76.4)	0.854
No	8 (22.2)	28 (77.8)	
Per capita household incomet			
≤ 1 minimum wage	74 (26.4)	206 (73.6)	0.010
> 1 minimum wage	9 (12.2)	65 (87.8)	
Religion (n = 348)			
No	4 (14.8)	23 (85.2)	0.293
Yes	76 (23.7)	245 (76.3)	

\*Pearson's chi-square test; †Current minimum wage: R\$ 880.00, Brazil, 2016.

**Table 2** - Characterization of risky use of at least one psychoactive substance in the last three months as a consequence of health-related variables among professional truck drivers, Rio de Janeiro, Brazil, 2016

Variables	Risky use of at least one substance		p*
	Yes n (%)	No n (%)	
Tobacco (n = 353)			
Smokers/ex-smokers	45 (26.9)	122 (73.1)	0.149
Non-smoking	38 (20.4)	148 (79.6)	
Self-assessment of health (n = 353)			
Bad	31 (33.0)	63 (67.0)	0.012
Good	52 (20.1)	207 (79.9)	
Complaints of insomnia			
Have	56 (33.1)	113 (66.9)	< 0.001
It does not have	27 (14.6)	158 (85.4)	
Common mental disorders (n = 353)			
Presence	28 (39.4)	43 (60.6)	< 0.001
Absence	55 (19.5)	227 (80.5)	
Absenteeism due to illness			
From 1 day	32 (30.5)	73 (69.5)	0.043
No day	51 (20.5)	198 (79.5)	
Number of chronic diseases (n = 353)			
3 or more	25 (24.5)	77 (75.5)	0.780
Up to 2	42 (23.7)	193 (76.9)	

\*Pearson's chi-square test.

**Table 3** - Characterization of the use of at least one psychoactive substance in the last three months as a consequence of occupational variables among professional truck drivers, Rio de Janeiro, Brazil, 2016

Variables	Risky use of at least one substance		p*
	Yes n (%)	No n (%)	
Employment (n = 353)			
Not CLT	30 (28.8)	74 (71.2)	0.127
CLT	53 (21.3)	196 (78.7)	
Working time (n = 349)			
Up to 15 years	50 (28.6)	125 (71.4)	0.025
16 years or older	32 (18.4)	142 (81.6)	
Working hours per day			
13 or more	55 (33.1)	111 (66.9)	< 0.001
Up to 12 hours	28 (14.9)	160 (85.1)	
Hours of rest per day (n = 349)			
Up to 6	55 (28.8)	136 (71.2)	0.016
7 or more	28 (17.7)	130 (82.3)	
Hours of uninterrupted driving			
5 or more	49 (27.7)	128 (72.3)	0.060
Up to 4	34 (19.2)	143 (80.8)	
Job satisfaction			
Indifferent	14 (23.0)	47 (77.0)	0.148
Very dissatisfied	10 (16.4)	51 (83.6)	
Very satisfied	59 (25.4)	173 (74.6)	

\*Pearson's chi-square test; CLT – Brazilian Labor Laws.

**Table 4** - Poisson regression models for determining the prevalence of use of at least one psychoactive substance among professional truck drivers, Rio de Janeiro, Brazil, 2016

Variables	Model					
	Bivariate		Multivariate 1		Multivariate 2	
	PR	IC95%	PR	IC95%	PR	IC95%
Age						
Up to 42 years old	1.25*	1.01-1.53	0.94	0.61-1.46		
43 years or older	1.0		1.0			
Per capita household income						
≤ 1 minimum wage	2.17*	1.14-4.13	2.02†	1.08-3.78	2.03	1.08-3.83
> 1 minimum wage	1.0		1.0		1.0	
Complaints of insomnia						
Yes	2.27*	1.50-3.42	1.93†	1.28-2.91	2.18	1.46-3.26
No	1.0		1.0		1.0	
Self-assessment of Health						
Bad	1.64*	1.13-2.39	1.22	0.83-1.79		
Good	1.0		1.0			
Common mental disorders						
Presence	2.02*	1.39-2.93	1.23	0.81-1.86		
Absence	1.0		1.0			
Absenteeism due to illness						
From 1 day	1.49*	1.02-2.17	1.32	0.92-1.90		
No day	1.0		1.0			
Working time						
Up to 15 years	1.55*	1.05-2.30	0.71	0.46-1.10		
16 years or older	1.0		1.0			
Hours of uninterrupted driving						
5 or more	1.44*	0.98-2.12	1.07	0.73-1.58		
Up to 4	1.0		1.0			
Hours of rest per day						
Up to 6	1.62*	1.09-2.43	0.93	0.62-1.41		
7 or more	1.0		1.0			
Working hours per day						
13 or more	2.22*	1.49-3.33	1.74†	1.10-2.74	1.95	1.30-2.92
Up to 12	1.0		1.0		1.0	

\* $p < 0.20$ ; † $p \leq 0.05$ .

Table 4 indicates that the last regression model (Model 2) showed that the family income, presence of insomnia complaints, and working hours remained remarkably and independently associated with the outcome. In other words, the prevalence of the use of at least one psychoactive substance was significantly higher among workers with per capita family income equal to or less than one minimum wage (PR: 2.03; 95%CI: 1.08-3.83), with reported complaints of insomnia (PR:2.18; 95% CI: 1.46-3.26) and with more than 13 hours of work per day (PR: 1.95; 95%CI: 1.30-2.92).

Regarding the quality of the model fit, the final model (Model 2) presented *deviance* similar to the complete model (Model 1), showing that the variables reduction to a simpler model was pertinent. In addition, there was no increase in the information criteria: the AIC was stable while the BIC decreased.

## DISCUSSION

The study found that lower family income, insomnia symptoms and long working hours were independently associated with the use of at least one psychoactive substance among professional truck drivers.

This is a professional group that is known to be exposed to unhealthy lifestyle habits and potentially stressful conditions, such as sleep deprivation. A study conducted with 134 truck

drivers detected the presence of amphetamines in 10.8% of urine samples, the use of which was justified to maintain wakefulness during work<sup>(29)</sup>. On the one hand, the use of substances is justified by the need to stay awake for the performance of the work; on the other, sleep can be impaired by the use of these substances, and frequent use is often associated with insomnia and its deleterious effects<sup>(30)</sup>.

Insomnia is a recognized risk factor for relapse and misuse of psychoactive substances<sup>(31)</sup>, and it is also commonly observed in the acute phase of withdrawal from these substances<sup>(32)</sup>. In addition, professional truck drivers with insomnia have twice the risk of experiencing traffic accidents and three times the risk of experiencing near-miss situations compared to non-insomniac drivers<sup>(33)</sup>. Consequently, the drowsiness resulting from sleep deprivation decreases attention, thus predisposing the driver to traffic accidents<sup>(29)</sup>. A recent study showed that drowsiness at the wheel, long working hours, and sleep deprivation contributed to a more significant violation of traffic rules and, consequently, greater insecurity on the roads<sup>(34)</sup>.

Concerning working hours, two Brazilian studies found results similar to those presented here. The first pointed out that exposure to working hours of more than 14 hours a day was associated with the use of amphetamines, and the prevalence of use of this substance was 14% higher when compared to those who worked less than 14 hours a day<sup>(35)</sup>. The second showed that

working more than 12 hours a day increased the likelihood of using amphetamines by just over twice. In addition, the study revealed that the use of alcoholic beverages was a precursor factor for the use of amphetamines<sup>(36)</sup>.

The long working hours, stimulated by the need to meet the companies' deadlines<sup>(8)</sup>, are a powerful characteristic of this profession and are often associated with the use of amphetamines<sup>(37)</sup>. While the relationship between the use of amphetamine and long work hours tends to be intuitive, exposure to alcohol use tends to be less apparent. A meta-analytic study<sup>(38)</sup> showed that drivers who exceed the number of recommended working hours are more likely to increase alcohol use to levels that pose a health risk. These results are possibly explained both by the conditions of the work environment, which tends to place high demands and low autonomy on the task and by the inherent characteristics of individuals. In this context, the use of alcohol can represent a channel to relieve pressures at work and act as a relevant sleep inducer<sup>(38)</sup>.

Some studies have shown a strong relationship between economic structure, family or global, and the consumption of psychoactive substances. Typically, the volume of alcohol consumed is higher in countries with a higher gross domestic product and high economic inequality, especially among young people<sup>(39)</sup>. A recent research in Brazil observed a similar trend that related the increase in the economy between 2006 and 2012 to an increase in alcohol consumption<sup>(40)</sup>. However, the relationship between these variables in exclusively occupational samples still needs to be clarified, especially concerning the use of amphetamine and cocaine. In the present study, workers with lower income were more likely to have psychoactive substance use when compared to those with higher income. A probable explanation for such a result lies in the length of the working day of the studied group already discussed earlier. Long working hours can reflect, for example, financial difficulties and the search for better wages<sup>(38)</sup>. Presumably, the result found reveals the use of substances that help in the fulfillment of the goals imposed by the company and, consequently, in the desired increase in the income of these workers.

At all events, the issues surrounding the health and well-being of truck workers also concern safety. Thus, Law N° 13,103/2015 and Ordinance N° 116 of 13/11/2015 of the Ministry of State for Labor and Social Security<sup>(11)</sup> are a set of actions that regulate different spheres of the profession and seek to protect workers. Thus, it is essential to develop public policies based on evidence and strengthened by scientific research that identifies traffic accidents as work accidents among truck drivers. To that end, the study seeks to: contribute to the development of the actions established in the five pillars of the Decade of Road Safety proposed by the United Nations (UN) and WHO, starting in 2011 and ending in 2020 in all member countries; and strengthen actions to improve the health and quality of life of workers in their workplace, which are Brazilian roads. These factors are considered of foremost importance for the construction of public policies aimed at the health of truck drivers.

### Study limitations

Potential limitations of the present study may include: (i) the possible embarrassment generated during the application of the

questionnaire since the use of psychoactive substances is considered a sensitive topic for this occupational group. Even with the guarantee of confidentiality of the information and anonymity of the participants, it is possible to have occurred prevarication bias or false response commonly observed in studies of this nature; (ii) studies in the field of occupational health cannot ignore the effect of the healthy worker since the study included only active workers in the sample; (iii) the cross-sectional design of the study does not allow establishing the causal relationship between the exposure and outcome variables.

However, their results demonstrated an association that must be explored by longitudinal studies to investigate whether low family income, insomnia symptoms, and long working hours are predictors of the use of psychoactive substances among professional truck drivers. Despite its limitations, it is possible to consider that the study achieved its principal objective since it independently observed multiple factors associated with the use of psychoactive substances among professional truck drivers.

### Contributions to the field of Nursing and Health

Despite its limitations, the present study explains issues that extremely intervene in quality of life and health of these workers. It is, therefore, a public health issue given the presence of these professionals on the roads and how such behavior can impact the prevention and promotion of health and safety on Brazilian roads.

To that end, the present study contributes to the area of Occupational Health and, specifically, Occupational nursing. The results presented may provide subsidies to promote public health policies. It is in line with the development of the actions established in the five pillars of the Decade of Road Safety proposed by the United Nations (UN) and WHO and the actions proposed in the Manual of Safety, Hygiene, and Occupational Medicine focused on its 36 regulatory standards for labor issues in Brazil.

### CONCLUSIONS

The results obtained in this research allowed the identification of the diseases and weaknesses found in the sociodemographic profile, as well as occupational and health characteristics associated with the highest frequency in the use of at least one psychoactive substance in this group of workers. The results and the design of the present study do not allow to establish any relationship between the use of psychoactive substances and the occurrence of traffic accidents. However, they encourage reflection on their use and potential participation in tragic and avoidable outcomes such as traffic accidents. The recognition of this scenario allows, ultimately, to promote the assistance provided to workers, the most effective inspection by competent bodies, and, consequently, safety on the roads.

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