

Prevalence of psychotropic substance use by urban bus drivers: a systematic review*

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Objective: to investigate the prevalence of psychotropic substance use by urban bus drivers by reviewing studies addressing drug use among this population and identify potential associations between drug use and sociodemographic and occupational variables inherent to the profession. **Method:** systematic literature review searching the MEDLINE, LILACS, SciELO, EMBASE, PsycINFO and CAPES databases using the Portuguese equivalents of the following: *bus drivers*, *urban bus drivers*, and *drug use* from July to December 2015. **Results:** these professionals are exposed to important occupational stressors daily and the consumption of drugs may be related to negative coping strategies. Drug use among these workers is of concern, as well as the apparent relationship between drug use and traffic accidents. **Conclusion:** stressors inherent to the profession and inefficient responses to stress may lead these professionals to use psychotropic substances. Thus, studies addressing the prevalence of drug use in a significant sample of urban bus drivers are necessary.

Descriptors: Psychotropic Drugs; Epidemiology; Review; Automobile Driving.

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Prevalência do consumo de substâncias psicotrópicas por motoristas de ônibus urbano: uma revisão sistemática

Objetivo: investigar a prevalência do consumo de substâncias psicotrópicas por motoristas de ônibus urbano através da revisão de estudos publicados sobre o consumo de drogas por essa população e identificar a associação entre esse consumo e as variáveis sociodemográficas e ocupacionais inerentes à profissão. Método: revisão sistemática de literatura utilizando as bases MEDLINE, LILACS, SciELO, EMBASE, PsycINFO e CAPES, utilizando-se os descritores: *motoristas de ônibus*, *motoristas de ônibus urbano*, *uso de drogas* e *consumo de drogas*, de julho a dezembro de 2015. Resultados: esses profissionais estão cotidianamente expostos a importantes fatores estressores ocupacionais e o consumo de drogas pode estar relacionado a uma estratégia negativa de enfrentamento do estresse. O uso de drogas entre esses profissionais é preocupante, bem como a evidente relação entre esse uso e a ocorrência de acidentes de trânsito. Conclusão: estressores inerentes à profissão e respostas pouco eficazes ao estresse podem levar tais profissionais ao uso de substâncias psicotrópicas. Faz-se necessária a realização de estudos sobre a prevalência do consumo de drogas em uma amostra significativa de motoristas de ônibus urbano.

Descritores: Psicotrópicos; Epidemiologia. Revisão; Condução de Veículo.

Prevalencia del uso de estupefacientes entre conductores de autobuses urbanos: una revisión sistemática

Objetivo: investigar la prevalencia del uso de sustancias psicotrópicas entre los conductores de autobuses urbanos mediante la revisión de los estudios publicados sobre el uso de drogas en esta población e identificar una asociación entre el consumo de dichas sustancias y las variables sociodemográficas y laborales inherentes a la profesión. Método: revisión sistemática de la literatura utilizando las bases de datos MEDLINE, LILACS, SciELO, EMBASE, PsycINFO y CAPES, utilizando los descriptores: *conductores de autobuses*, *conductores de autobús urbano*, *uso de drogas* y *consumo de drogas*, de julio a diciembre de 2015. Resultados: estos profesionales están expuestos diariamente a factores estresantes importantes en el ámbito laboral y el uso de drogas puede constituir una estrategia negativa para hacer frente al estrés. El uso de drogas entre estos profesionales es preocupante, así como el vínculo claro entre el uso de dichas sustancias y la incidencia de accidentes de tránsito. Conclusión: los estresores inherentes a la profesión y las respuestas ineficaces al estrés pueden llevar a estos profesionales a usar sustancias psicotrópicas. Por lo que se hace necesaria la realización de estudios sobre la prevalencia del consumo de drogas en una muestra significativa de conductores de autobuses urbanos.

Descriptores: Psicotrópicos; Epidemiología; Revisión; Conducción de Automóvil.

Introduction

In Brazil, traffic accidents (TA) are the third largest cause of death⁽¹⁾ and the second most frequent cause of hospitalization for external factors, becoming an important public health issue⁽²⁾. The consumption of psychotropic substances by drivers is among the risk factors of TA, figuring among the human factors in the category "Weakness and distraction"⁽³⁾. Although TA configure the second leading cause of death among young people, studies on the costs related to illicit drug use and driving in Brazil are rare⁽⁴⁻⁵⁾. There are important evidence that the use of alcohol and/or other drugs cause damage in the performance of safe driving, significantly increasing the risk of TA⁽⁶⁾. These accidents, in turn, can generate serious economic and social consequences. In this regard, several countries have established strict laws to punish people caught driving under the influence of drugs⁽⁴⁾. In Brazil, however, despite the Brazilian Transit Code provides punishment for drug use by drivers, control actions are aimed to curb only the consumption of alcohol, without identifying the other drugs intoxication⁽⁵⁾.

Public transportation by bus professionals are subject to many risks to their physical and mental health, being also more exposed to TA with fatal and non-fatal victims⁽⁷⁾. This is a category of utmost importance given the collective responsibility of their activity, characterized by daily transportation of passengers⁽⁸⁾, in such a way that any change in that professional's health can cause driving errors and TA, directly affecting drivers, passengers and pedestrians⁽⁹⁾.

In this sense, knowing the characteristics and particularities of this work is important to understand how some factors, such as stress, which directly affect the driver's mental and physical health, can contribute to the abusive consumption of psychotropic substances among them.

Drug use shows close relationship with labor contexts⁽¹⁰⁾ and, although social risks arising from the drug abuse and addiction at work are old issues, only recently this phenomenon has caught the attention of researchers⁽¹¹⁻¹²⁾. However, studies on the role of labor in the etiology of drug abuse and drug addiction are scarce, like truck drivers that use amphetamines to drive for long hours without sleeping⁽¹¹⁾.

Despite the conditions involving bus drivers work and their consequences (such as stress, cardiovascular, musculoskeletal and audiometric disease) have been the subject of national studies, the studies carried out with the objective of evaluating the prevalence

of psychotropic substances use, their predisposing factors and consequences among these professionals, in Brazil, are still scarce. Besides, few professions are as stressful as urban bus driver⁽¹³⁾, so the stress factor (associated with vulnerability factors) may be related to the abuse/dependence of psychotropic substances by this population.

In view of this scenario, the objective of this study was to undertake a systematic review of works already published on the prevalence of psychotropic substances use by urban bus drivers, as well as to identify the possible association between that and the sociodemographic and occupational variables involving this profession.

Method

The literature review was conducted between July and December 2015 through electronic search in the following health databases: *Medical literature Analysis and Retrieval System Online* (MEDLINE), *Latin American and Caribbean literature in Health Sciences* (LILACS), *Scientific Electronic Library Online* (SciELO), *Excerpta Medica* (EMBASE) PsycINFO and Portal de Periódicos da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). We complemented the research searching for "grey literature" in the Digital Library of theses and dissertations (BDTD) and in the database of theses and dissertations of the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). We also consulted the bibliographical references, which composed the works collected and selected in the abovementioned databases.

To compose the search strategy, the descriptors and their synonyms, as well as the free terms and keywords, in Portuguese, Spanish and English, we used *bus drivers*, *urban bus drivers*, *drug use* and *drug abuse*, isolated or combined among them with the assistance of Boolean operators AND and OR, increasing the sensitivity of the search.

Inclusion criteria were: all scientific studies of quantitative and qualitative approach, without filter or chronological limit of publication, of subjects related to the area of health, arising from exploratory/descriptive, experimental researches or systematic reviews and presenting information on the prevalence of psychotropic drug use by urban bus drivers. Exclusion criteria were: publications in editorials, notes, letters, abstracts, case reports, comments, duplicate articles and studies of obscure or dubious methodology.

Through that strategy we recovered 741 studies in the electronic databases described above, besides 06 studies identified through manual search in other sources. After reading the title, abstract and excluding duplicate references, we selected 53 studies for integral reading. Subsequently, we excluded more other 32 studies because they did not meet the inclusion criteria, keeping 21 researches that investigated the consumption of substances among urban bus drivers. After the selection, we evaluated the quality of the selected studies according to the criteria proposed by

Boyle⁽¹⁴⁾, thus being divided into the categories A (low risk of bias) and B (risk of moderate bias).

The selected studies were carried out in Brazil (N=12)^(9,15-25), in Peru (N=2)⁽²⁶⁻²⁷⁾, in India (N=2)⁽²⁸⁻²⁹⁾, in Turkey (N=1)⁽³⁰⁾, in Taiwan (N=1)⁽³¹⁾, in Thailand (N=1)⁽³²⁾, in South Korea (N=1)⁽³³⁾, and Serbia (N=1)⁽³⁴⁾. Among the 21 selected studies, two were PhD theses⁽¹⁵⁻¹⁶⁾ and two master's dissertations^(9,17). The following flowchart (Figure 1) shows the number of studies selected and eliminated in each of the steps.

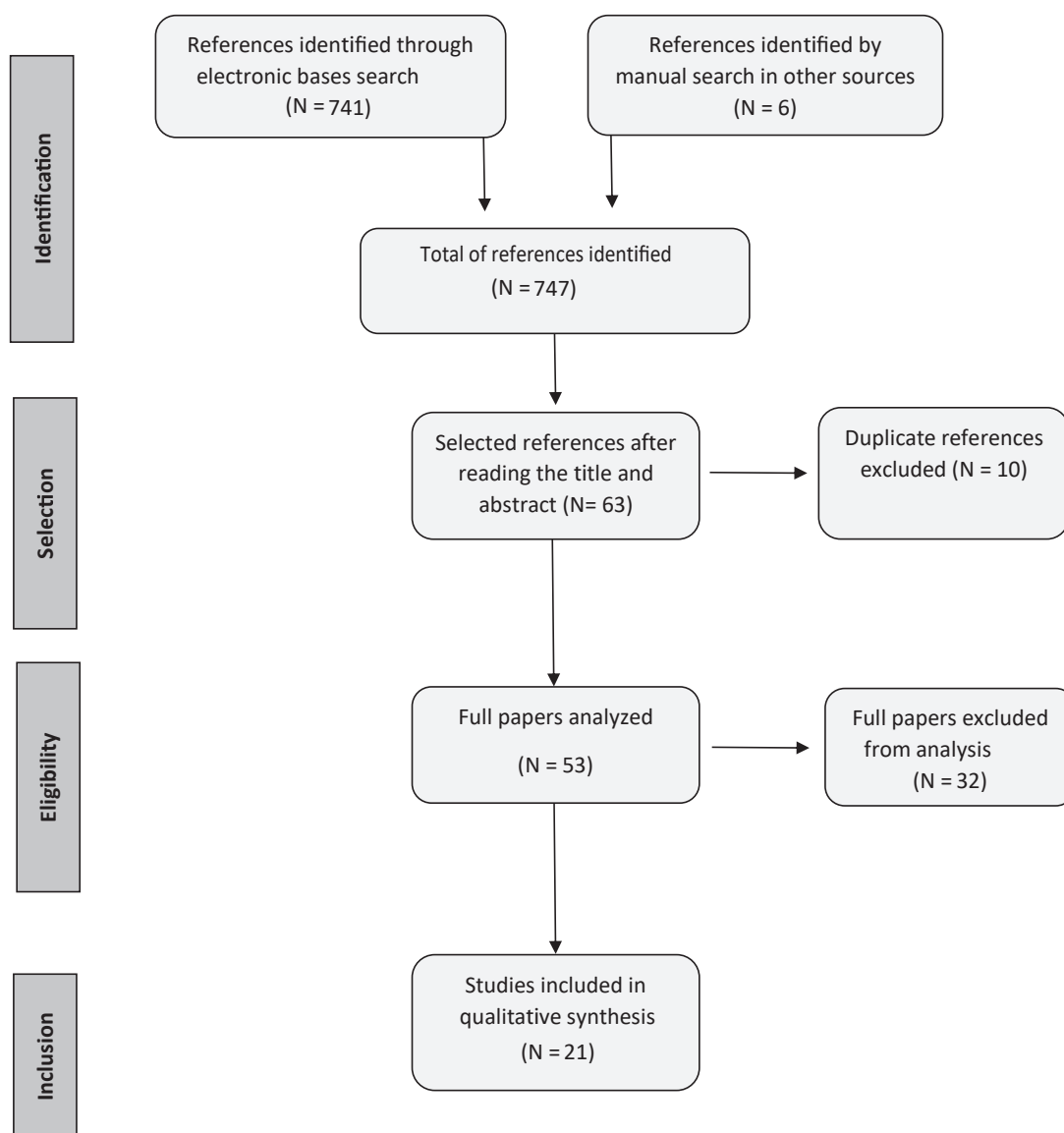


Figure1 - Flow chart of study selection

Results

Below, we listed the 21 national (Figure 2) and international (Figure 3) studies raised in that review.

They were qualified according to their level of quality according to Boyle's criteria⁽¹⁴⁾, place, subject, study design, employed instruments, objectives and research source.

Reference	Place	Amount of subjects	Instruments	Objectives
Siqueira RCL ^{(9)*}	Goiânia (GO)	100 drivers	Questionnaire	Assess the levels of exposure to urban noise and characterize its possible associations with auditory and extra-auditory symptoms, of public transportation drivers in the city of Goiânia (GO)
Rossi MM ^{(15)*}	São Paulo (SP)	309 retired drivers	Questionnaire	Estimate the prevalence of hearing loss among the retired bus drivers in the city of São Paulo and estimate the influence of hearing loss on these workers quality of life
Carvalho RB ^{(16)†}	São Paulo (SP)	174 drivers	AUDIT Questionnaire	Check the level of anxiety and depressive symptoms mentioned and draw the profile of alcohol use in the urban bus drivers of the metropolitan area of Sao Paulo that sought medical care; Identify psychosocial risk factors of the work associated with this profile
Zanelato LS ^{(17)*}	Bauru (SP)	38 drivers (19 control group- CG and 19 experimental group- EG)	Demographic questionnaire	Analyze the effectiveness of an intervention program of stress management related to coping and resilience in urban bus drivers
Costa LB, Koyama MAH, Minuci EG, Fischer FM ^{(18)*}	Metropolitan region of São Paulo (SP) and Belo Horizonte (MG)	1,762 drivers in the metropolitan region of São Paulo and 984 drivers in the metropolitan region of Belo Horizonte	Questionnaire	Evaluate working conditions and health of passenger transport drivers
Landim MBP, Victor EG ^{(19)*}	Teresina (PI)	107 drivers	Structured questionnaire based on the Framingham Score	Estimate the absolute risk of of coronary artery disease contraction in the next 10 years, in urban public transport drivers of Teresina, Piauí, according to Framingham risk score
Benvegnú LA, Fassa AG, Facchini LA, Breitenbach F ^{(20)*}	Santa Maria (RS)	214 drivers and 214 neighbors	CAGE Questionnaire	Identify the prevalence of hypertension (SAH) and associated factors in urban bus drivers of Santa Maria (RS)
Costa MM, Mastroeni SSBS, Reis MAM, Erzinger GS, Mastroeni MF ^{(21)*}	Joinville (SC)	306 drivers	Demographic questionnaire	Estimate the prevalence of overweight of Joinville (SC) urban network bus drivers and identify possible factors associated with it
Moraes GN, Fayh APT ^{(22)*}	Porto Alegre (RS)	201 drivers	Questionnaire	Assess the nutritional status and the risk for CVD of collective transport drivers in Porto Alegre (RS)

Figure 2 continues on next page...

Reference	Place	Amount of subjects	Instruments	Objectives
Alquimim AF, Barral ABCR, Gomes KC, Rezende MC de ^{(23)*}	Montes Claros (MG)	53 drivers	Questionnaire	Assess the risk factors for cardiovascular diseases of bus drivers in Montes Claros (MG)
Moura Neto AB de, Silva MC da ^{(24)†}	Pelotas (RS)	107 drivers and 118 collectors	CEBRID Questionnaire	Describe the working conditions, health and lives indicators of urban collective transport workers in the city of Pelotas (RS)
Gonçalves ES, Torres RM, Peixinho TC, Borges CCL ^{(25)*}	Salvador (BA)	100 drivers	Questionnaire	Identify risk factors for coronary artery disease (DAC) in public collective transport drivers and their knowledge as a way of prevention in the municipality of Salvador (BA)

*Risk of moderate bias (Category B, according to criterion proposed by Boyle)⁽¹⁴⁾; †Low risk of bias (Category A, according to criterion proposed by Boyle)⁽¹⁴⁾

Figure 2 - Synthesis of studies on the consumption of psychotropic substances among urban bus drivers in Brazil, in chronological order. (N = 4,787)

Study	Place	Subjects	Instruments	Objectives
Risco J, Ruiz P, Mariños A, Ramos M, Salmavides F et al. ^{(26)*}	Lima/Peru	237 drivers and 197 rickshaw drivers	Questionnaire	Determine the prevalence of excessive sleepiness in bus drivers and rickshaws drivers in Lima, Peru
Ruiz-Grosso P, Ramos M, Samalvides F, Vega-Dienstmaier J, Kruger H ^{(27) +}	Lima/Peru	278 drivers and 227 rickshaw drivers	CAGE Questionnaire	Estimate the prevalence of common mental disorders of bus drivers and rickshaws drivers in Lima, Peru
Goon S, Bipasha MS ^{(28)*}	Dhaka city, Bangladesh/ Índia	400 drivers	Questionnaire	Determine the prevalence, standard and socio-economic determinants of smoking among bus drivers in Dhaka, Bangladesh
Lakshman A, Manikath N, Rahim A, Anilakumari VP ^{(29)*}	North Kerala/ India	179 drivers	Questionnaire	Assess the prevalence of hypertension in the population of male bus drivers in North Kerala, India
Issever H, Onen L, Subuncu HH, Altunkaynak O ^{(30)*}	Istanbul/ Turquia	208 drivers from the European sector of Istanbul	Questionnaire	Examine how precarious conditions of work influence the psychological health of drivers and identify the personality characteristics of this population
Lin SK, Lee CH, Hu WH ^{(31)*}	Taipei/ Taiwan	505 bus drivers and 506 autonomous drivers	MAST and DAST Questionnaire	Investigate the differences in stress in life, drug consumption pattern and associated mental disorders between bus and taxi drivers in Taiwan

Figure 3 continues on next page...

Study	Place	Subjects	Instruments	Objectives
Kaewboonchoo O, Morioka I, Saleekul S, Miyai N, Chaikittiporn C, Kawai T ^{(32)*}	Bangkok/ Tailândia	420 drivers	Interview	Clarify the role of lead levels in the blood (Pb-B) as one of the cardiovascular risk factors
Shin SY, Lee CG, Song HS, Kim SH, Lee HS, Jung MS et al. ^{(33)*}	Gwangju/ Coréia do Sul	443 drivers	Questionnaire	Assess the occurrence of cardiovascular events such as heart attack and stroke among professional drivers
Djindjic´ N, Jovanovic´ J, Djindjic´ B, Jovanovic´ M, Pesic´ M, Jovanovic´ JJ ^{(34)*}	Nis/ Servia	94 urban bus drivers, 100 inter-municipal bus drivers, 123 truck drivers and 122 taxi drivers	Questionnaire	Determine the association between labor stress index and its aspects and arterial hypertension and lipid disorders of male drivers

*Risk of moderate bias (Category B, according to criterion proposed by Boyle)⁽¹⁴⁾

Figure 3 - Synthesis of studies on the consumption of psychotropic substances among urban bus drivers in the world in chronological order. (N = 4,039)

About to the size of the samples collected in these studies, they varied from 38⁽¹⁷⁾ to 1762⁽¹⁸⁾ urban bus drivers. As for quality, only three studies were classified in category A^(16,24,27), indicating low risk of bias; the others had a risk of moderate bias (category B). As for the design of the study, only one did not present cross-methodology, defined as quasi-experimental by the author⁽¹⁷⁾. With regard to the instruments, only one of the studies used the interview, the others used some kind of questionnaire.

None of the studies mentioned the consumption of illicit substances among drivers. Besides, only one of the international studies⁽³¹⁾ evaluated the consumption of benzodiazepines among the interviewed drivers, in addition to alcohol and tobacco, which ranged from 4.6% to 8.3%, depending on the test used for detection.

The prevalence of tobacco consumption was evaluated in 18 of the 21 selected studies, ranging from 14,2%⁽¹⁵⁾ to 93%⁽²⁸⁾. However, among the aforementioned studies, one of them⁽²⁰⁾ did not present the prevalence of this consumption. About smoking, its prevalence varied from 4%⁽⁹⁾ to 18.9%⁽²²⁾.

The consumption of alcohol was evaluated in 16 of the 21 studies, and its prevalence varied from 5%⁽⁹⁾ to 90%⁽²²⁾. Although one of the studies⁽³⁰⁾ claimed that about half of the sample consume alcohol, it did not present the exact number or percentage of subjects that use this substance. As for the prevalence of alcoholism, it varied from 4.2%⁽²⁰⁾ and 68%⁽²⁶⁾.

Discussion

The low number of recovered studies reinforces and updates the affirmation of Ponce and Leyton⁽⁴⁾ that the relationship between drug use and TA is still a little exploited problem in Brazil. Despite the largest number of Brazilian studies compared to other countries, studies involving urban bus drivers are still scarce, although they are important actors of the everyday reality of Brazilian transit, especially in the major cities. Almost two decades ago, Souza and Silva⁽³⁵⁾ warned about the shortage of Brazilian studies involving urban bus transport workers, especially those focused on the study of drug use. Another curious fact is that none of the selected studies was carried out in developed countries, indicating that the consumption of psychotropic substances by bus driver is still an active concern of developing countries.

In Brazil, despite the fact that there are strict transit laws in relation to drivers who are caught driving under the influence of psychotropic substances, control actions are focused only to curb the consumption of alcohol among drivers, without any effectiveness in identifying other drugs^(5,36), whether licit or illicit, psychotropic or otherwise. In this sense, the results of a recent study conducted by Pelicão⁽⁵⁾ on drug use – in addition to alcohol – between victims of TA justify the need to review such control actions by the Brazilian public administration. The aim of this study was to investigate the presence of alcohol and illicit drugs

(cocaine, amphetamines and cannabis) in 391 fatal victims of TA in the metropolitan area of Vitória (ES). In this, 44.8% of the samples presented a positive result for the use of psychotropic substances (alcohol – 36.1%; cocaine – 12%; amphetamines – 4.1%; Marijuana – 4.1%). Although alcohol was the most prevalent substance used, it calls the attention the presence of other substances which, as the author's warning, are not investigated by the public authorities during traffic control. It is worth remembering that the study also pointed out that alcohol was associated with other drugs in 9.2% of the victims.

As regards the analysis of the prevalence of psychotropic substances consumption by urban bus drivers, some peculiar characteristics of this profession practice should be considered, mainly in relation to its stressors. According to the study of Zanelato⁽¹⁷⁾, involving 52 urban bus drivers from a city in the countryside of the state of São Paulo, these professionals are daily exposed to chronic stressors, such as: exposure to burglaries and accidents; bad humored and disrespectful passengers; Engine noise; Poorly located bus stops; Exposure to hot weather; Limited speed; Poor asphalt conservation; Bikers, cyclists, other drivers and pedestrians who disrespect traffic; Compliance with strict company standards; Unfair control and warning; Pressure to comply with schedules; Changes in lines and schedules; Professional devaluation; The need to have to drive and charge the ticket, poor lighting to give the change. In addition, although they have a pre-established routine, drivers are subjected to unexpected and uncontrollable events in their daily lives.

About the labor stressors, in a study conducted by Battiston, Cruz and Hoffmann⁽³⁷⁾, aiming to investigate the working and health conditions of 21 urban collective transport drivers of the city of Florianópolis (SC), the subjects referred that the stress factors involving the their profession practice are linked to physiological conditions, internal environmental conditions (buses), external environmental conditions (traffic), interpersonal relationship in work, fear and suffering at work and organization and control of the work process.

The aforementioned factors, allied to unhealthy coping strategies, limited personal resources or lack of social support can adversely influence worker's healthcare, family relationships and professional performance, favoring the development of stress or burnout in these professionals⁽¹⁷⁾. That is why in situations of stress they create strategies of coping both positive and negative, and that the consumption of tobacco and the intake of alcoholic beverages can be one of the strategies used to reduce the tension and mitigate the discomfort related to the profession⁽¹⁷⁾.

Through this revision, although scarce, the recovered studies allow some notes on the prevalence of the use of psychotropic drugs by urban bus drivers. We could observe that among the 21 studies, three International^(27-28,31) and three national^(16,20,24) aimed directly at assessing the prevalence of drug use among urban bus drivers, and the other researches evaluated consumption indirectly. In this sense, they tried to evaluate, for example, levels of stress, prevalence of hypertension, working conditions, among others. One of the studies did not specify the type of questionnaire used⁽²⁸⁾, the others used specific questionnaires for the evaluation of drug use: CAGE (acronym that results from the keywords contained in the questions of the test: C: Cut-down; A: Annoyed; G: Guilt; E: Eye-opener)^(20,27), MAST (Michigan Alcoholism Screening Instrument for Teenagers) and DAST (Drug Abuse Screening Test)⁽³¹⁾, AUDIT (Alcohol Use Disorders Test)⁽¹⁶⁾ and CEBRID (questionnaire elaborated by the Brazilian Center for information on Psychotropic Drugs)⁽²⁴⁾. We point out that only one of the studies⁽³¹⁾ evaluated the occurrence of another drug besides alcohol and tobacco, presenting also the result of the consumption of benzodiazepines in the studied population.

We observe that both tobacco and alcohol consumption showed great variability. Among international studies, the prevalence of tobacco use varied from 36,1%⁽³⁴⁾ to 93%⁽²⁸⁾. The latter stands out by revealing that among the smokers, 26.8% smoked from 5 to 20 cigarettes/day, 44.9% smoked from 21 to 40 cigarettes/day and 22.9% smoked more than 40 cigarettes/day. About alcohol, the prevalence varied from 15,3%⁽³¹⁾ to 86,3%⁽²⁹⁾. According to this latest study, 13.7% of respondents consumed alcohol daily. Nevertheless, Ruiz-Grosso, Ramos, Samalvides, Vega-Dienstmaier and Kruger⁽²⁷⁾ mention that 67.7% of their driver sample used alcohol and the research of Shin, Lee CG, Song, Kim, Lee HS, Jung et al.⁽³³⁾ points out that 25.4% of the assessed drivers were high risk drinkers.

When compared to international studies, both the prevalence and the variability of the results were lower among the national studies. The use of tobacco ranged from 4%⁽⁹⁾ to 31,4%⁽¹⁸⁾. As for the prevalence of alcohol use, it varied from 5%⁽⁹⁾ to 90%⁽²²⁾. In this last study, 1.5% of drivers admitted they consume alcoholic beverages daily and 8.5% weekly. Another research pointed out that 39.1% of respondents had low-risk alcohol consumption⁽¹⁶⁾, but 10.9% of them made harmful/abusive use of alcohol, 13.8% made abusive use and 2.9% were already dependent. Furthermore, a study by Gonçalves, Torres, Peixinho and Borges⁽²⁵⁾ revealed that 65% of the evaluated subjects consumed more than two alcoholic every time they drank.

It is difficult to compare the results concerning the prevalence of psychotropic substances consumption between international and national studies because there is no hegemony among the instruments used, since few used validated and standardized questionnaires. Another factor that contributed to the great variability of prevalence concerns the non-standardization of studies in relation to the use of alcohol, tobacco or benzodiazepines since there may be studies that measure the use of these substances in life – experimental, –, others in the year and even in the month, which generates biased comparison results. Besides, the high risk of bias of most of the recovered studies hampers such a comparison.

It is also worth mentioning some limitations observed in the studies selected in this review. None of them evaluated the consumption of illicit substances among urban bus drivers. Furthermore, as already mentioned, only six of them had the objective of evaluating the consumption of substances by the population. This may have contributed to the low quality of most of this review works, since they have not used appropriate sampling, instruments and statistical methods, increasing the risk of the results bias.

Another limitation point out concerns the great variability of the results, which can be justified by the fact that most of these studies used the questionnaire as a data collection tool. This instrument may present measurement errors, an important source of bias, since there is the risk that, as per Zanelato⁽¹⁷⁾, drivers provide only socially accepted responses during the interview, which would result in a prevalence of underestimated consumption to what happens in reality. Another measurement error may be due to the position of the question and how it is asked to the subject of the research. Thus, identical or very similar questions can generate completely different results depending on your position in the questionnaire and/or the treated subject⁽³⁸⁾. To complement such an argument, a research that uses self-reporting in its methodology can present as difficulties the following facts: (a) covert events lead to a difference between the behavior reported by the subject and their real behavior, (b) only socially acceptable behaviors are reported and (c) the subject presents difficulties in understanding the items of the instrument used⁽³⁹⁾.

Conclusion

The urban bus driver is exposed to important stress factors that can adversely influence his health and well-being, endangering their social relationships and

professional performance. The stress factors involved in this profession practice – which is considered one of the most unhealthy –, accompanied by inefficient coping responses, can lead drivers to make use of psychotropic substances as one of the negative strategies of coping. The concern is not only related to a greater exposure of drivers to an abusive consumption/dependence of substances that can cause harm to their physical and mental health, but mainly to the obvious relationship between drug use and TA, which potentially involves a great number of victims and is considered a growing issue of world public health.

We think, therefore, that it is necessary to carry out studies on the working conditions and health with significant sample of urban bus drivers to sensitize the population to the urgent need of creating and/or implementing public policies focused on improving public transport, working conditions and the quality of life of the professionals involved, in addition to preventing and supervising the use of licit and illicit drugs by drivers in general.

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