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Factors associated with the use of anxiolytic drugs among military firefighters

Fatores associados ao uso de medicamentos ansiolíticos entre bombeiros militares

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ABSTRACT: ***Introduction:*** Use of anxiolytic drugs is an option for treating psychological symptoms. However, even if their use is controlled, there are risks of dependence, intoxication and cognitive alterations. Uncontrolled use among workers worsens these problems. ***Objectives:*** Identify the prevalence of anxiolytic use and to know the factors associated with consumption in military firefighters. ***Method:*** Cross-sectional survey of 711 firefighters from Belo Horizonte, Minas Gerais, Brazil, was conducted through self-reporting. Multinomial logistic regression was used to investigate associations between sociodemographic characteristics, living, working and health conditions and anxiolytic consumption in a controlled or uncontrolled manner. ***Results:*** Prevalence of anxiolytic use was 9.9%. For 7.5% of firefighters the consumption occurred without indication and/or specialized therapeutic control. Controlled use was only associated with symptoms compatible with Common Mental Disorder (OR = 23.6; 95%CI 6.54 – 85.11). Uncontrolled use was associated with length of service (OR = 2.57; 95%CI 1.03 – 6.40), smoking (OR = 3.22; 95%CI 1.50 – 6.91) and symptomatology compatible with Common Mental Disorder (OR = 4.02; 95%CI 2.17 – 7.45). ***Conclusion:*** The high prevalence of consumption indicates alert to occupational health programs.

Keywords: Mental health. Occupational health. Anti-anxiety agents. Firefighters. Risk factors.

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RESUMO: ***Introdução:*** O uso de ansiolíticos é uma opção no tratamento de sintomas psíquicos. Contudo, ainda que o uso seja controlado há riscos de dependência, intoxicação e alterações cognitivas. O uso não controlado entre trabalhadores agrava tais problemas. ***Objetivos:*** Identificar a prevalência do uso de ansiolíticos e conhecer os fatores associados ao consumo em bombeiros militares. ***Método:*** Pesquisa transversal de base censitária investigou 711 bombeiros de Belo Horizonte, Minas Gerais, por meio de autorrelato. Regressão logística multinomial foi utilizada para verificar associação entre características sociodemográficas, condições de vida, trabalho e saúde e consumo de ansiolíticos de modo controlado ou não. ***Resultados:*** A prevalência do uso de ansiolíticos foi 9,9%. Para 7,5% dos bombeiros o consumo ocorreu sem indicação e/ou controle terapêutico especializado. O uso controlado foi associado ao relato compatível com Transtorno Mental Comum (OR = 23,6; IC95% 6,54 – 85,11). O uso não controlado foi associado ao tempo de serviço (OR = 2,57; IC95% 1,03 – 6,40), ao tabagismo (OR = 3,22; IC95% 1,50 – 6,91) e ao Transtorno Mental Comum (OR = 4,02; IC95% 2,17 – 7,45). ***Conclusão:*** A alta prevalência de consumo indica alerta para as ações dos programas de saúde ocupacional.

Palavras-chave: Saúde mental. Saúde ocupacional. Ansiolíticos. Bombeiros. Fatores de risco.

INTRODUCTION

Anxiolytics are psychotropic adjunctive medications for the treatment of anxiety and other mental disorders[1]. They are a public health problem[2] due to their increasing consumption and to the severity of adverse effects[3].

When opting for the use of anxiolytics, it is essential to educate the user on the temporary nature of the prescription[4] and the necessary monitoring of the consumption[5]. Anxiolytics can lead to addiction, intoxication, and cognitive and behavioral changes[6].

The use of this type of medication can be a strategy for users to cope with the barriers they find in facing their anguish[7]. On the one hand, some barriers are related to the difficulty in compensating distressing effects through positive coping, such as physical and social activities[8], strengthening of family ties[9] and religious or spiritual trust[10]. On the other hand, the obstacles may be related to the deficiencies of mental health services[3]. In several localities, there is a shortage of professionals qualified to recognize the serious risks inherent in psychotropic drugs and other treatment possibilities[11].

Imbalances between the individual's internal resources and contexts unfavorable to positive responses increase the chance of anxiolytic use[7]. Workers in emergency services work in an environment characterized by high labor demands, as they deal with traumatic events, perform tasks in the face of imminent risks, and act under temporary pressure[12]. Such demands may exceed the ability to cope daily with strong emotional reactions[13].

In the case of military firefighters, besides being under the high demands inherent to emergency professionals[12], they are also inserted in a work environment characterized by disciplinary and hierarchical rigidity[14]. Therefore, the nature of the activities and the negative psychosocial factors can influence the mental health of these professionals[15].

Assistance actions and mechanisms to protect the health of all workers are recommended both by the guidelines of the international agencies[16] and by public policies in Brazil[17]. Epidemiological studies focusing on the use of psychoactive drugs by workers while performing their duties can support the planning of occupational surveillance actions by identifying factors associated with consumption. However, investigations that seek to know the circumstances of anxiolytic use in groups of urban emergency workers are rare. Thus, this study aimed to identify the prevalence of anxiolytic use and to know the factors associated with their use in military firefighters.

METHOD

Cross-sectional study based on data from the survey entitled "Posttraumatic Stress Disorder in Belo Horizonte Firefighters, Brazil"[18]. The subjects were the male firefighters from the Military Fire Brigade of Minas Gerais (CBMMG) in exercise for more than 12 months in the three battalions, based in Belo Horizonte. Firefighters working for less than one year were excluded considering the minimum time of exposure to the occupational stressors necessary to observe health effects[19]. The exclusion of women occurred due to the reduced number of women in the force (7.3%), which would make it impossible to construct multivariate models separated by sex. In addition, women firefighters are more susceptible to the use of anxiolytics and less active in operational service (the most exposed to risk factors)[18].

Of the 954 firefighters working for more than one year in the corporation, 160 were considered ineligible: 70 women, 30 on vacation or leave, 30 assigned to other units, and 30 participants in the pilot phase. Thus, 794 firefighters were invited to participate and 711 (89.5%) responded to the survey, surpassing the goal set for health studies (60%)[20].

The data were collected between February and August 2011, through a structured questionnaire that was self-administered anonymously. Adequacy and applicability were tested in a pilot study.

The outcome (use of anxiolytics) was investigated in three groups:

1. non-users (no use);
2. users with clinical indication and under medical monitoring (controlled use);
3. users with no clinical indication and/or medical follow-up (uncontrolled use).

The variable was elaborated from the answers to three questions of said instrument, considering the last 12 months:

1. "Have you ever used tranquilizers (anxiety medicine)?";
2. "Has a doctor ever told you that you have had or currently has an anxiety disorder?";
3. "Have you ever undergone psychiatric care?".

The first group ("no use") was composed by firefighters who answered "no" to the first question. The second ("controlled use") consisted of those whose answers were positive for

the three questions. The third ("uncontrolled use") included subjects with negative responses to the second and/or third questions.

The differentiation between groups sought to empirically examine the care given to subjects vulnerable to the use of anxiolytics, once exposure to occupational stressors was recognized. Thus, the presence of the mental pathology indicative of anxiolytic consumption was identified (question 2) and considered relevant to identify whether pharmacological therapy occurred during follow-up by specialized professionals (question 3). To compare the prevalence of anxiolytic use, the frequencies found in the literature were grouped according to the classification adopted in the present investigation.

The explanatory variables were grouped into four blocks, considering the level of approximation with the outcome:

- sociodemographic (more distal level);
- stressful life events;
- work conditions;
- health conditions (more proximal level).

The sociodemographic variables studied were: skin color, marital status, children, schooling, and monthly family income.

Stressful life events were evaluated through validated questions about situations experienced in the last 12 months, classified as adverse events and social discrimination[21]. Both variables were categorized according to the amount of events lived.

The variables related to working conditions were: rank, time of service, operational stressors, organizational stressors (demand, control, support) and physical environment. Exposure to operational stressors was evaluated by the Traumatic Events List[22], adapted for emergency professionals, in which are listed 15 typical stressors experienced during work in the last 12 months. Considering the median of the total score, the variable was analyzed dichotomously.

Organizational stressors were constructed using indicators of psychosocial aspects of work, evaluated by the Job Content Questionnaire (JCQ) in its Portuguese adapted version[23]. Such an instrument maps the perception of psychosocial stressors in the workplace that relate to the demand required by the tasks, to the control over work and to social support. Based on the median, the dimensions were analyzed as dichotomous variables.

The workplace's physical environment was investigated through questions regarding the availability of personal protective equipment (PPE), noise in the workplace, noise originated outside work, and the adequacy of material resources to perform the tasks. Positive responses were added and included as ordinal variable.

Regarding health conditions, the following were addressed: physical activity, smoking, problematic use of alcohol, and reporting of Common Mental Disorder (CMD) symptoms. To evaluate the existence of CMD-compatible symptoms, the Portuguese version of the Self-Reporting Questionnaire (SRQ)[24] was used, which includes 20 questions for screening for non-psychotic disorders through somatic complaints. The variable considered seven or more positive responses as a cut-off point.

The problematic use of alcohol was analyzed by the CAGE Questionnaire for detection of alcoholism[25], a tracking tool named with the acronym for its four questions: cut down, annoyed by criticism, guilty, and eye-opener. Two or more positive responses were considered indicative of alcohol abuse and dependence.

All participants signed an Informed Consent. The project was approved by CBMMG and by the Research Ethics Committee.

DATA ANALYSIS

Multinomial logistic regression was used to investigate the associations with the outcome in the three groups, the first being the reference. The entry of the explanatory variables considered the approximation in relation to the outcome: from the most distal to the most proximal level. There was a multicollinearity between age and length of service. The length of service variable was chosen because of the relevance for the interpretation of the study hypothesis.

The analysis was performed using Statistical Package for Social Sciences (SPSS) software version 20.0 in four stages. The first (descriptive) presented the frequencies of the variables. The second (univariate) verified probable factors related to controlled and uncontrolled use, considering p value ≤ 0.20. The third (multivariate intermediate) included the variables indicated in the previous step in each of the four blocks, with manual withdrawal graded according to the highest p value, considering p ≤ 0.10. The last step (multivariate final) grouped all variables selected in the intermediate models by blocks. The variables with the highest p value were excluded one by one, with only the p ≤ 0.05 remaining in the final model.

RESULTS

About 90% of firefighters reported not having used anxiolytics in the past 12 months. The use was reported by 70 (9.9%) firefighters, of whom 17 (2.4%) indicated controlled use and 53 (7.5%), uncontrolled use.

Among the respondents, the following were the predominant: brown skin color (51.8%), married (55.4%), children (53.1%), secondary schooling level (66%), and monthly family income up to seven minimum wages (65.5%). Among firefighters, 30.7% experienced two or more adverse events and 25.9% were exposed to some type of discrimination. There was a predominance of privates (45.3%) and those working for less than three years in the institution (35.3%). In relation to stressors, 48.8% reported high exposure to operational stressors, 46.9% had low control, 40.6% had high demand, 30.9% reported low support and 50.4% were experiencing two or more poor conditions in their physical work environment. Less than half (45.1%) practiced physical activity three or more times per week, 7.6% were smokers, 9.6% reported problematic use of alcohol and 15.9% had CMD-compatible symptoms.

In the univariate analysis, significant associations with the outcome indicated a higher proportion of uncontrolled consumption among firefighters with children. Controlled use was higher among those with less schooling (Table 1). There was

Table 1. Distribution of sociodemographic characteristics, according to the use of anxiolytics in firefighters. Brazil, 2011.

Variables	Total	Non-use	Controlled use		Uncontrolled use	
	n (%)	n (%)	n (%)	OR (95%CI)	n (%)	OR (95%CI)
Skin color						
White	216	192 (88.9)	6 (2.8)	1.00	18 (8.3)	1.00
Black	98	87 (90.5)	3 (2.1)	0.75 (0.15 – 3.80)	8 (7.4)	0.87 (0.35 – 2.17)
Brown	368	330 (90.4)	9 (2.2)	0.79 (0.27 – 2.30)	29 (7.4)	0.88 (0.47 – 1.64)
Yellow	29	27 (92.9)	1 (3.5)	1.29 (0.15 – 11.18)	1 (3.6)	0.40 (0.05 – 3.17)
Marital status						
Married/ common-law marriage	394	344 (87.7)	13 (3.1)	1.00	37(9.2)	1.00
Not married	284	266 (93.7)	4 (1.4)	0.45 (0.14 – 1.42)	14 (4.9)	1.16 (0.46 – 2.93)*
Divorced/ Widowed	33	28 (87.1)	1 (3.2)	1.05 (0.13 – 8.37)	4 (9.7)	1.02 (0.30 – 3.57)*
Children						
No	334	315 (94.6)	3 (0.9)	1.00	16 (4.5)	1.00
Yes	377	324 (86.1)	15 (3.8)	1.52 (0.33 – 6.84)**	38 (10.1)	2.39 (1.28 – 4.43)***
Schooling						
Primary	54	43 (79.6)	5 (9.3)	1.00	6 (11.1)	1.00
Secondary	469	426 (90.9)	11 (2.2)	0.29 (0.09 – 0.91)***	32 (6.9)	0.59 (0.23 – 1.49)
Higher	188	172 (91.4)	2 (1.1)	0.17 (0.31 – 0.97)***	14 (7.5)	0.65 (0.24 – 1.78)
Family income[a]						
Up to 7 MW	466	414 (88.7)	13 (2.9)	1.00	39 (8.4)	1.00
Above 7 MW	245	227 (92.6)	4 (1.6)	0.57 (0.18 – 1.79)	14 (5.8)	0.66 (0.35 – 1.24)

OR: odds ratio; 95%CI: 95% confidence interval; MW: minimum wage; variables associated with the outcome in the univariate analysis: *p ≤ 0.20; **p ≤ 0.10; ***p ≤ 0.05; [a]minimum wage in 2011: BRL 545.00.

greater consumption in both uses among firefighters with higher exposure to adverse life events (Table 2). There was an increase in the two modes of consumption in relation to the length of service (Table 3). There was a greater proportion in both modes among those with CMD-compatible symptoms. Uncontrolled use was also more frequent among smokers (Table 4).

Considering controlled use, the following variables were included in the intermediate stage ($p \leq 0.20$ in the univariate): children, schooling (socio-demographic block); adverse events (life events block); rank, time, control (work block); physical activity, alcohol, CMD (health block). As for uncontrolled use, these were included in the intermediate analysis: children, marital status (sociodemographic block); adverse events, discrimination (life events block); rank, time, operational stressor, support (work block); physical activity, smoking, alcohol, CMD (health block).

At the final stage of the multivariate analysis ($p \leq 0.10$), the following variables were included for the controlled use: children, schooling, adverse events, time, control and CMD. In the final stage for uncontrolled use were: children, adverse events, time, operational stress, smoking and CMD. In the final model ($p \leq 0.05$), only the CMD variable remained associated with controlled use of anxiolytics. As for uncontrolled consumption, these remained associated: time, smoking and CMD. The Goodness-on-fit test indicated a satisfactory fit of the final model (Table 5).

DISCUSSION

The prevalence of anxiolytic use in firefighters was 9.9%. It should be pointed out that, for 7.5%, the use occurred without indication and/or specialized therapeutic control, being

Table 2. Distribution of life events according to the use of anxiolytics in firefighters. Brazil, 2011.

Variables	Total	Non-use	Controlled use		Uncontrolled use	
	n (%)	n (%)	n (%)	OR (95%CI)	n (%)	OR (95%CI)
Adverse event						
0	268	254 (94.7)	2 (0.8)	1.00	12 (4.5)	1.00
1	224	199 (90.8)	7 (2.3)	3.08 (0.59 – 16.06)**	18 (6.9)	1.55 (0.71 – 3.40)**
≥ 2	219	184 (83.8)	10 (4.6)	6.38 (1.38 – 29.45)***	25 (11.6)	2.76 (1.35 – 5.63)***
Discrimination						
0	527	482 (91.4)	11 (1.5)	1.00	34 (7.1)	1.00
1	128	114 (88.2)	3 (2.7)	1.20 (0.33 – 4.40)	11 (9.1)	1.25 (0.60 – 2.59)*
≥ 2	56	45 (79.0)	3 (6.1)	2.80 (0.75 – 10.38)	8 (14.9)	1.97 (0.83 – 4.67)*

OR: odds ratio; 95%CI: 95% confidence interval; variables associated with the outcome in the univariate analysis: *$p \leq 0.20$; **$p \leq 0.10$; ***$p \leq 0.05$.

Table 3. Distribution of working conditions according to the use of anxiolytics in firefighters. Brazil, 2011.

Variables	Total	Non-use	Controlled use		Uncontrolled use	
	n (%)	n (%)	n (%)	OR (95%CI)	n (%)	OR (95%CI)
Rank						
Private	322	306 (95.1)	4 (1.2)	1.00	12 (3.7)	1.00
Corporal	152	127 (83.2)	6 (4.0)	0.64 (0.12 – 3.58)*	19 (12.8)	1.81 (0.61 – 5.36)*
Sergeant/officer	237	208 (87.6)	7 (3.0)	0.65 (0.11 – 3.69)*	22 (9.4)	1.30 (0.44 – 3.82)*
Length of service (years)						
< 3	251	243 (96.8)	1 (0.4)	1.00	7 (2.8)	1.00
3–16	228	202 (88.5)	6 (2.7)	4.86 (0.55 – 42.29)**	20 (8.8)	3.38 (1.39 – 8.24)***
17–30	232	196 (84.5)	10(4.1)	10.83 (1.35 – 86.5)***	26 (11.4)	4.85 (2.05 – 11.46)***
Operational stressor						
Low exposure	349	320 (91.7)	8 (2.3)	1.00	21 (6.0)	1.00
High exposure	334	294 (88.0)	9 (2.7)	1.18 (0.45 – 3.09)	31 (9.3)	1.76 (0.98 – 3.16)**
Control						
High	379	335 (88.1)	13(3.5)	1.00	31 (8.4)	1.00
Low	332	308 (92.6)	3 (0.9)	0.36 (0.09 – 1.34)**	21 (6.5)	0.75 (0.42 – 1.34)
Demand						
Low	419	381 (90.8)	9 (2.2)	1.00	29 (7.9)	1.00
High	292	263 (89.8)	8 (2.8)	1.30 (0.49 – 3.42)	21 (7.4)	1.06 (0.59 – 1.90)
Support						
High	489	437 (89.3)	11 (2.3)	1.00	41 (8.5)	1.00
Low	222	204 (91.7)	6 (2.8)	1.21 (0.44 – 3.33)	12 (5.5)	0.72 (0.36 – 1.42)*
Precarious conditions in the physical work environment						
0[a]	81	73 (90.0)	–	–	8 (10.0)	1.00
1	269	241 (89.8)	6 (1.8)	1.00	22 (8.4)	0.80 (0.34 – 1.89)
≥ 2	361	327 (90.4)	11(3.1)	1.83 (0.67 – 4.99)	23 (6.5)	0.62 (0.27 – 1.46)

OR: odds ratio; 95%CI: 95% confidence interval; variables associated with the outcome in the univariate analysis: *p ≤ 0.20; **p ≤ 0.10; ***p ≤ 0.05; [a]variable regrouped for controlled use, since there was no case for the first situation.

Table 4. Distribution of health conditions according to the use of anxiolytics in firefighters. Brazil, 2011.

Variable	Total	Non-use	Controlled use		Uncontrolled use	
	n (%)	n (%)	n (%)	OR (95%CI)	n (%)	OR (95%CI)
Physical activity						
Never	33	26 (78.7)	2 (6.1)	1.00	5 (15.2)	1.00
1–2 times/wk.	357	313 (87.5)	11 (3.1)	0.84 (0.16 – 4.30)*	33 (9.4)	0.77 (0.26 – 2.28)*
≥ 3 times/wk.	321	306 (95.2)	4 (1.3)	0.44 (0.06 – 3.03)*	11 (3.5)	0.36 (0.11 – 1.22)*
Smoking						
No	657	598 (91.4)	15 (2.3)	1.00	44 (6.3)	1.00
Yes	54	40 (74.1)	2 (3.7)	1.63 (0.36 – 7.32)	12 (22.2)	3.24 (1.51 – 6.94)***
Alcohol						
No	643	590 (90.9)	12 (2.3)	1.00	41 (6.8)	1.00
Yes	68	51 (74.8)	5 (7.1)	2.43 (0.75 – 7.88)*	12 (18.1)	2.15 (1.01 – 4.56)*
CMD						
No	589	557 (94.5)	3 (0.5)	1.00	29 (5.0)	1.00
Yes	122	87 (68.2)	12 (10.9)	23.6 (6.54 – 85.11)***	23 (20.9)	3.93 (2.11 – 7.30)***

OR: odds ratio; 95%CI: 95% confidence interval; CMD: Common Mental Disorder; variables associated with the outcome in the univariate analysis: *p ≤ 0.20; **p ≤ 0.10; ***p ≤ 0.05.

Table 5. Final multivariate logistic regression for factors associated with the use of anxiolytics in firefighters. Brazil, 2011[a].

Variables	Controlled use			Uncontrolled use		
	OR	95%CI	p-value	OR	95%CI	p-value
Length of service (years)						
< 3	–	–	–	1.00	–	–
3–16	–	–	–	2.57	1.03 – 6.40	0.042
17–30	–	–	–	3.93	1.64 – 9.41	0.002
Smoking						
No	–	–	–	1.00	–	–
Yes	–	–	–	3.22	1.50 – 6.91	0.004
CMD						
No	1.00	–	–	1.00	–	–
Yes	23.6	6.54 – 85.11	< 0.001	4.02	2.17 – 7.45	< 0.001

OR: odds ratio; 95%CI: 95% confidence interval; CMD: Common Mental Disorder; [a]multinomial model, having "non-use" as reference category.

significantly associated with a longer time of service in the corporation, with smoking, and with reports of symptoms compatible with CMD.

Comparing the results with other samples of workers, the prevalence was superior to that of electricians (4%)[26], lawyers (5%)[7] and pharmacists (6%)[7]; being similar to that found in military police (10%)[27]. With regard to uncontrolled use, the result also surpassed the prevalence classified in this modality. Among workers in the tertiary sector, the prevalence of non-medical use was 2.5%[28].

The high prevalence of use of anxiolytics in firefighters is intriguing. In view of the periodic health assessments carried out by the corporation, smaller values related to health impacts would be expected in this group[18]. This result allows us to shed light on the phenomenon of presenteeism. It is possible that anxiolytic consumption indicates a strategy for the presence of the firefighters in the line of duty, despite some physical or psychological problems. Presenteeism relates health problems to loss of productivity, and failure to comply may lead to aggravation of the disease[29].

The chance of uncontrolled anxiolytic consumption increased linearly according to length of service in the corporation. However, it is difficult to distinguish the effects of work seniority from those related to age, because, generally, those who are older are also the ones at work for the longest time. If this is so, instead of directing the discussion to the focus that admits the accumulation of the effects of exposure to the working environment in the groups with longer working hours, it will be necessary to consider the expected effects of the human aging process. In older individuals, a higher prevalence of symptoms, chronic diseases, and treatment seeking, including drug therapy, is expected[30]. Thus, firefighters with longer working hours may be more vulnerable to the cumulative effects of the activities performed, in addition to the physiological effects of aging[31].

Smoking is related to the consumption of anxiolytics in higher doses, because nicotine, by speeding up the metabolism, reduces the drug's effect. It is known that cessation of smoking may reduce the uncontrolled use of anxiolytics[32].

Firefighters reporting symptomatology compatible with mental disorder presented four times more chance of uncontrolled consumption of anxiolytics. If, on the one hand, this result is consistent, because anxiolytics are used in the treatment of such symptoms[33], it is worrying, on the other hand, to identify that workers with psychic symptoms are using anxiolytics without specialized therapeutic follow-up.

Uncontrolled consumption of anxiolytics by active firefighters calls for in-depth discussions regarding the increase in risks of adverse effects arising from use without adequate monitoring. The practice of inappropriate consumption of psychiatric medication can have serious consequences, such as precarious living, especially due to the high risk of dependence[2]. In the social sphere, the possible cognitive and behavioral changes generated by the uncontrolled consumption of anxiolytics can cause interpersonal conflicts and increase the occurrence of accidents[3]; in addition to raising costs for the health system, including the use of emergency care and hospitalization[34].

In this survey, the use of anxiolytics was not related to coping with symptoms arising from labor-related factors. There are two characteristics in this professional field that possibly explain such an outcome. The first is the employment relationship of firefighters. The guarantee of permanence in the job can help implementing instrumental coping strategies[35]. Therefore, it is possible to assume that the employment stability of firefighters attenuated the magnitude of the effects of labor stressors[36]. The second characteristic is the social recognition given to firefighters. Strengthened self-esteem in recognition situations favors resilience mechanisms[37]. Thus, resilience and self-esteem are psychological characteristics that can exert modulations on symptoms and adversities[38], favoring adaptive confrontation methods[39]. These characteristics seem to mark the entrance and the permanence of these professionals, favoring the confrontation process to take place in the occupational routine, with less adherence to the practice of seeking solutions in drug therapy.

It is worth highlighting the importance of improving occupational surveillance actions in order to identify early risk factors and increase access to mental health services, so as to ensure vulnerable workers the tranquility to report symptoms and adhere to the treatment, when applicable[14]. It is noteworthy that CBMMG initiatives have innovated the work of occupational health services. Special mention is made of the recent regulation of the Occupational Health Program of Military Firefighters[40], whose focus is the early screening of psychic symptoms identified in a previous study[18]. This program intends to recover the interface with the National Mental Health Policy[41] insofar as it proposes not only periodical individual clinical evaluation, but also an integral and collective approach, through a multiprofessional team with permanent qualification.

The findings of this study suggest three reflections: the use of anxiolytics among older firefighters causes greater vulnerability to adverse effects; the association with smoking is an overlapping of coping strategies that is harmful to health; and the consumption of anxiolytics is related to the worse state of mental health.

LIMITATIONS AND ADVANTAGES

Because of the study's design, it is impossible to establish causal and/or temporal relationships. The information obtained through self-report is subject to bias because it causes the subjects to minimize their failures in the care for their own health or to value their personality[42]. However, when used after an adequate pilot test, self-reports have high validity and reliability[43].

The comparison of the consumption figures with other groups was limited, due to the heterogeneity of the parameters to study and classify the prevalences of anxiolytic use[2]. In addition, the results may have been underestimated, given the moral barriers to revealing symptoms and practices, especially in military institutions that are faithful to

behavioral norms[14], and also because of the Healthy Worker Effect, a common survival effect in cross-sectional studies, since patients are more likely not to be in their posts at the time of the research[44].

It should also be mentioned that the model used, with hierarchical input of variables, as well as the amplitude of the confidence intervals for association estimates, although reflecting the initial expectation considering the characteristics of the outline and the population, indicate caution when interpreting the results. In addition, bias is possible because the analyzes were not adjusted for sex.

The novelty of the approach to emergency professionals, the high rate of participation and the use of instruments validated and adapted to the Brazilian context ensured the quality and relevance of the study. The training and supervision of the collection team minimized possible biases. The pilot phase allowed for the adequacy of the items constructed for the questionnaire and the participants' adherence. The distribution of the respondents in the three groups of outcome analysis allowed the comparison between them and reinforced the innovative character of this investigation. Taken together, such characteristics increased the strength of the results to support the interpretations presented.

CONCLUSION

The prevalence of anxiolytic use in military firefighters was higher than in other professional categories. The high consumption in a group with such social responsibility requires alertness and deserves special attention from managers and government agencies. Uncontrolled consumption increases the risks of adverse effects, and may compromise workers' quality of life.

The association of uncontrolled use of anxiolytics with increased time in the corporation can increase the vulnerability of firefighters. The findings also indicate that anxiolytic and smoking is a risky combination of harmful habits, and consumption associated with worse mental health indicates a response to deal with suffering.

The results stimulate the continuity of investigations related to firefighters' health, especially regarding innovations in the planning of mental health services. Prospective studies may further analyze the factors associated with drug consumption and the mechanisms involved.

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