

ORIGINAL ARTICLE

High Prevalence and Factors Associated with Post-Traumatic Stress Disorder in Brazilian Public Safety Personnel: A Cross-Sectional Study

Ester Ribeiro Cunha^{a*}, Aline Ribeiro Borçoi^b, Pierre Augusto Victor da Silva^c, Suzanny Oliveira Mendes^d, Ivana Alece Arantes Moreno^e, Barbara Risse Quaioto^f, Amanda Sgrancio Olinda^g, Marcele Lorentz Mattos de Souza^h, Carlos Henrique Pagani Corrêaⁱ, Jussara de Azevêdo Ciqueira^j, Joaquim Gasparini dos Santos^k, Nathália Maria da Silva Campos^l, Pedro Luiz Ferro^m, Elizeu Batista Borlotiⁿ, Adriana Madeira Álvares-da-Silva^o.

 Open access

^a Biotechnology Postgraduate Program/ RENORBIO, Universidade Federal do Espírito Santo – UFES, Vitória, Espírito Santo, Brazil;

^b PhD in Biotechnology, Health Sciences Center, Universidade Federal do Espírito Santo – UFES, Vitória – ES, Brazil;

^c Biotechnology Postgraduate Program, Universidade Federal do Espírito Santo – UFES, Vitória, Espírito Santo, Brazil;

^d PhD in Biotechnology, Health Sciences Center, Universidade Federal do Espírito Santo – UFES, Vitória – ES, Brazil;

^e PhD in Biotechnology, Health Sciences Center, Universidade Federal do Espírito Santo – UFES, Vitória – ES, Brazil;

^f Biotechnology Postgraduate Program/ RENORBIO, Universidade Federal do Espírito Santo – UFES, Vitória, Espírito Santo, Brazil;

^g Master in Biotechnology, Health Sciences Center, Universidade Federal do Espírito Santo – UFES, Vitória – ES, Brazil;

^h PhD in Biotechnology, Health Sciences Center, Universidade Federal do Espírito Santo – UFES, Vitória – ES, Brazil;

ⁱ Departamento de Farmácia e Nutrição, Universidade Federal do Espírito Santo, ES 29043-900, Brazil;

^j Biotechnology Postgraduate Program/ RENORBIO, Universidade Federal do Espírito Santo – UFES, Vitória, Espírito Santo, Brazil;

^k Laboratório de Investigação Médica (LIM) 31, Hospital das Clínicas HCFMUSP, Faculdade de Medicina, Universidade de São Paulo, Brazil;

^l Biotechnology Postgraduate Program, Universidade Federal do Espírito Santo – UFES, Vitória, Espírito Santo, Brazil;

^m Collective Health Postgraduate Program (PPSCG/UFES), Health Sciences Center Universidade Federal do Espírito Santo – UFES, Vitória – ES, Brazil;

ⁿ Department of social and developmental Psychology, Universidade Federal do Espírito Santo – UFES, Vitória, Espírito Santo, Brazil;

^o Department of Morphology, Health Sciences Center, Universidade Federal do Espírito Santo – UFES, Vitória – ES, Brazil;

Corresponding author
estercunha.bio@gmail.com

Manuscript received: may 2025

Manuscript accepted: june 2025

Version of record online: august 2025

Abstract

Introduction: Post-traumatic stress disorder (PTSD) is a public health issue with higher prevalence among public safety professionals due to the traumatic nature of their work. These professionals face significant risks to their mental health, quality of life, and occupational performance. However, data on the prevalence and determining factors of PTSD in this population remain limited.

Objective: to assess the prevalence of post-traumatic stress disorder and identify factors associated with its development among public safety professionals.

Methods: a cross-sectional study was conducted with 206 public safety professionals from Espírito Santo, Brazil. The PCL-5, WHOQOL-BREF, DASS-21, and socioeconomic questionnaires were applied. PTSD was defined as a PCL-5 score ≥ 36 . Data analysis included non-parametric tests, Poisson regression with robust variance, and chi-square tests using R, SPSS, and STATA. The study was approved by the University of Espírito Santo Research Ethics Committee (approval number 5.382.872/2022).

Results: 37.4% of participants showed probable PTSD. Factors associated with lower post-traumatic stress disorder prevalence included older age, male sex, and higher quality of life in the psychological and environmental domains. Greater intensity of stress symptoms was significantly associated with higher prevalence of post-traumatic stress disorder.

Conclusion: this study's findings highlight the association between emotional stress perception, psychological and environmental quality of life domains, and post-traumatic stress disorder, as well as intrinsic factors such as age and sex. These results reinforce the need for the development and implementation of public mental health policies focused on early screening and diagnosis of mental disorders, stress management, and promotion of well-being for public safety professionals, aiming to improve occupational and psychological quality of life, reduce stress, and prevent or manage post-traumatic stress disorder.

Keywords: Stress Disorders, Post-Traumatic, Quality of Life, Mental Health, Risk Factors, Frontline Workers.

Suggested citation: Cunha ER, Borçoi AR, Silva PAV, Mendes SO, Moreno IAA, Quaioto BR, Olinda AS, Souza MLM, Corrêa CHP, Ciqueira JA, Santos JG, Campos NMS, Ferro PL, Borloti EB, Álvares-da-Silva AM. High Prevalence and Factors Associated with Post-Traumatic Stress Disorder in Brazilian Public Safety Personnel: A Cross-Sectional Study. *J Hum Growth Dev.* 2025; 35(2):282-293. DOI: <http://doi.org/10.36311/jhgd.v35.17801>

Authors summary

Why was this study done?

This study was conducted because PTSD is a significant condition that can impact the mental health of public safety professionals, and there is still a scarcity of information in the literature regarding its prevalence and the determining factors contributing to its development in this population.

What did the researchers do and find?

The prevalence of PTSD and the factors associated with its development in public safety professionals were evaluated. Our findings revealed a high prevalence of probable PTSD (37.4%). Older age, being male, and higher quality of life in the psychological and environmental domains were associated with a lower prevalence of PTSD. On the other hand, an increase in the intensity of stress symptoms was associated with a higher prevalence of PTSD.

What do these findings mean?

Our results show that the development of PTSD symptoms in public safety professionals is associated with emotional stress perception, psychological and environmental domains of quality of life, as well as intrinsic factors such as age and sex.

INTRODUCTION

Post-Traumatic Stress Disorder (PTSD) is a serious public health issue that affects approximately 11% of the general population in Brazil¹. It can arise as a response to direct or indirect exposure to a traumatic stressor event^{2,3}. Individuals diagnosed with PTSD may exhibit reduced emotional regulation capacity and symptoms such as diminished interest in pleasurable activities, irritability, increased aggressiveness, violent behavior, and a persistent sense of threat. They are also at increased risk of comorbidities such as depression, substance abuse, and other disorders, which negatively impact quality of life and lead to higher costs for public health and social assistance systems^{2,4,5}.

It is known that about 40 to 90% of the general population may be exposed to one or more traumatic stressor events during their lifetime, yet only about 20 to 30% go on to develop PTSD. Recent studies have focused on understanding why some individuals develop PTSD following exposure to a stressor event, while others who have experienced similar events do not^{4,6}.

Public safety professionals, such as federal police officers, civil police officers, highway patrol officers, military police officers, and firefighters, are frequently exposed to traumatic and stressful events and are at high risk of developing PTSD^{7,8}. Around 14% of police officers worldwide meet the diagnostic threshold for PTSD, which can negatively affect both their quality of life and occupational performance, leading to impaired job performance, increased work absences, or even career abandonment^{9,10}. Additionally, they may experience cognitive impairments, memory and concentration difficulties, mood changes, depression, anxiety, and even suicidal ideation⁹⁻¹¹.

Age, marital status, education level, work schedule, organizational hierarchy, pre-existing mental health conditions (such as anxiety and depression), and social support have been described in the literature as risk factors for PTSD among public safety professionals^{12,13}.

Thus, PTSD has a significant impact on mental health, particularly among public safety professionals. However, there is still limited knowledge about the prevalence of this disorder and the determining factors that contribute to its development in this population. Understanding these aspects is essential to support the formulation of public policies and the implementation

of effective mental health programs, as well as to guide the creation of more targeted prevention and intervention strategies. Therefore, this study aimed to assess the prevalence of PTSD and identify the factors associated with its development among public safety professionals.

METHODS

Study Design

This is a cross-sectional study conducted as part of the program entitled "SOMA-SI," focused on research in the field of public security.

Study Location and Period

The study was carried out in the state of Espírito Santo, Brazil. Questionnaire application and data collection took place between April and December 2022.

Study Population and Eligibility Criteria

The study involved 206 public security professionals from the state of Espírito Santo, Brazil (Military Police, Federal Highway Police, Federal Police, Civil Guard, Military Fire Brigade, Civil Police, and Municipal Guard). Professionals were invited to voluntarily participate in the study.

All public security professionals from Espírito Santo who agreed to participate were included. The exclusion criterion was the presence of one or more missing responses in any of the 20 items of the PCL-5.

The sample size calculation was based on an estimated PTSD prevalence of 5% to 16% among police officers^{14,15}, considering the population of 17,154 public security professionals in Espírito Santo in 2021, a 5% absolute precision, and a 95% confidence level. As a result, the minimum required sample size ranged from 73 to 205 public security professionals. Therefore, the obtained sample size ($n = 206$) provides adequate statistical power for the proposed multivariate analyses.

Data Collection

Data was collected in person. Socioeconomic data, lifestyle habits, and professional characteristics were gathered through semi-structured questionnaires. The public security agencies were categorized as: Military Police, Fire Brigade, and Others (Municipal Guard, Federal Police, and Federal Highway Police).

In addition, the nature of the work performed was recorded and classified as external service (field work; tasks carried out outside corporate facilities, such as patrolling, responding to incidents, rescue, or inspections) and Internal service (administrative, technical, or support tasks performed within the organizational units).

Psychological anamnesis was conducted in the presence of a psychology professional using the following instruments: WHOQOL-BREF to assess quality of life; Depression, Anxiety and Stress Scale-21 (DASS-21), to assess symptoms of depression, anxiety, and stress; and Post-Traumatic Stress Disorder Checklist for DSM-5 (PCL-5) to assess symptoms indicative of probable PTSD.

The PTSD assessment was conducted using the PCL-5, a validated self-report instrument that evaluates the 20 PTSD symptoms outlined in the DSM-5¹⁶. The PCL-5 can be used to assess the presence, intensity, and severity of PTSD symptoms in an individual's life, track symptom changes during and after treatment, and support a provisional PTSD diagnosis. A cut-off score of ≥ 36 was used to identify participants with clinically significant symptoms, who were then categorized as having probable PTSD¹⁷, following the instrument's guidelines for population screening without constituting a definitive diagnosis.

The WHOQOL-BREF stands as a validated and widely adopted instrument for evaluating quality of life^{18,19}. It consists of a 24-item self-administered questionnaire covering four distinct domains: physical health, psychological health, social relationships, and environment¹⁸. In this study, participants' quality of life was categorized as either better or worse, using domain-specific median scores derived from the sample as cut-off points^{20,21}. The specific median cut-off scores were: physical health, 67.85; psychological health, 66.66; social relationships, 66.66; and environment, 59.37.

The 21-item Depression, Anxiety, and Stress Scale (DASS-21), a self-report instrument, was employed to assess symptoms of depression, anxiety, and emotional stress^{22,23}. For statistical analysis, both continuous DASS-21 scores and categorical classifications derived from these scores were utilized. Based on symptom severity, participants were grouped into five levels: normal, mild, moderate, severe, and extremely severe for each respective domain.

Data Analysis

The normality of data distribution was assessed using the Shapiro-Wilk test, and appropriate statistical tests were selected based on the data distribution. Means

(and standard deviations) or medians (and standard errors) were used for normally or non-normally distributed variables, respectively. PTSD prevalence was determined based on the frequency of participants who met the criteria for probable PTSD.

To investigate differences in PTSD scores between genders, the Wilcoxon-Mann-Whitney test was used, as it is suitable for comparing two independent samples without the assumption of normality. To assess differences in PTSD scores across age groups, the Kruskal-Wallis test was used, a non-parametric alternative to one-way ANOVA. If statistically significant differences were found, a Dunn post-hoc test with Bonferroni-adjusted p-values was applied to control for type I error.

Results were presented using descriptive measures (median and interquartile range), boxplot graphs, and test statistics and p-values for each comparison. All statistical analyses and graph construction were performed using R software (R Core Team, 2023)²⁴, version 4.4.2, and the integrated development environment RStudio (Posit Team, 2023), version 2024.12.0. The chi-square test and Poisson regression with robust variance were used to examine factors associated with PTSD in the study population. These analyses were conducted using SPSS v.25 and STATA v.17, respectively. All tests used a 95% confidence interval and a significance level of 5% ($p < 0.05$).

Ethical and Legal Aspects of the Research

The study was approved by the Research Ethics Committee of the Health Sciences Center at the Federal University of Espírito Santo (approval number: 5.382.872/2022). All participants agreed and signed the informed consent form (ICF).

RESULTS

This study included 206 public safety professionals, with a median age of 39 years and a median per capita income of R\$2962.50, equivalent to \$574.12. Most participants were male (73.8%), had children (73.8%), held a higher education degree (80.1%), worked in the Military Police (62.6%) and in internal service roles (59.2%), did not consume alcohol (56.3%), and did not smoke (91.3%). A majority reported better quality of life in the physical (56.3%), psychological (54.9%), social (56.4%), and environmental (56.1%) domains, and had symptoms classified as normal for depression (51.46%), anxiety (62.14%), and stress (53.4%). Among the 206 participants, 77 (37.4%) scored 36 or higher on the PCL-5, indicating probable PTSD (Table 1).

Table 1: Sociodemographic characteristics, quality of life and lifestyle, and mental health condition of the sample (n=206) - public security professionals, stratified by the presence of probable PTSD.

Characteristics	General	Without PTSD	PTSD	P valor
Sociodemographic				
Age, median (IQR)	39 (13) years			
Per capita income, median (IQR)	R\$2962.50 (R\$2700.00)			
Sex, n (%)				0.010*
Female	54 (26.2)	26 (48.1)	28 (51.9)	

Continuation - Table 1: Sociodemographic characteristics, quality of life and lifestyle, and mental health condition of the sample (n=206) - public security professionals, stratified by the presence of probable PTSD.

Characteristics	General	Without PTSD	PTSD	P valor
Male	152 (73.8)	103 (67.8)	49 (32.2)	
Educational level, n (%)				0.092
Without higher education	41 (19.9)	21 (51.2)	20 (48.8)	
With higher education	165 (80.1)	108 (65.5)	57 (34.5)	
Workplace agency, n (%)				
Military police	129 (62.6)	67 (51.9)	62 (48.1)	> 0.0001*
Fire department	25 (12.1)	21 (84.0)	4 (16.0)	0.016
Others	52 (25.2)	41 (78.8)	11 (21.2)	0.005
Type of service, n (%)				0.075
Field service (street)	82 (39.8)	45 (54.9)	37 (45.1)	
Internal service	122 (59.2)	82 (67.2)	40 (32.8)	
Children, n (%)				0.178
No	53 (25.7)	29 (54.7)	24 (45.3)	
Yes	152 (73.8)	99 (65.1)	53 (34.9)	
Quality of Life (WHOQOL) and Lifestyle Habits				
Alcohol consumption, n (%)				0.206
Does not currently drink	90 (43.7)	52 (57.8)	38 (42.2)	
Currently drinks	116 (56.3)	77 (66.4)	39 (33.6)	
Tobacco use, n (%)				0.517
Does not currently smoke	188 (91.3)	119 (63.3)	69 (36.7)	
Currently smokes	18 (8.7)	10 (55.6)	8 (44.4)	
Physical activity, n (%)				0.870
Sedentary	71 (34.5)	45 (63.4)	26 (36.6)	
Active	135 (65.5)	84 (62.2)	51 (37.8)	
Physical domain, n (%)				> 0.0001*
Worse quality of life	90 (43.7)	43 (47.8)	47 (52.2)	
Better quality of life	116 (56.3)	86 (74.1)	30 (25.9)	
Psychological domain, n (%)				> 0.0001*
Worse quality of life	93 (45.1)	40 (43.0)	53 (57.0)	
Better quality of life	113 (54.9)	89 (78.8)	24 (21.2)	
Social relationships domain, n (%)				> 0.0001*
Worse quality of life	93 (45.4)	41 (44.1)	52 (55.9)	
Better quality of life	112 (54.6)	87 (77.7)	25 (22.3)	
Environmental domain, n (%)				> 0.0001*
Worse quality of life	90 (43.9)	42 (46.7)	48 (53.3)	
Better quality of life	115 (56.1)	86 (74.8)	29 (25.2)	
Mental Health Conditions				
Depressive symptoms, n (%)				
Normal	106 (51.46)	93 (87.7)	13 (12.3)	> 0.0001*
Mild	28 (13.59)	16 (57.1)	12 (42.9)	0.548
Moderate	31 (15.05)	16 (51.6)	15 (48.4)	0.161
Severe	17 (8.25)	1 (5.9)	16 (94.1)	> 0.0001*
Extremely Severe	24 (11.65)	3 (12.5)	21 (87.5)	> 0.0001*

Continuation - Table 1: Sociodemographic characteristics, quality of life and lifestyle, and mental health condition of the sample (n=206) - public security professionals, stratified by the presence of probable PTSD.

Characteristics	General	Without PTSD	PTSD	P valor
Anxiety, n (%)				
Normal	128 (62.14)	106 (82.8)	22 (17.2)	> 0.0001*
Mild	10 (4.85)	6 (60.0)	4 (40.0)	0.841
Moderate	26 (12.62)	12 (46.2)	14 (53.8)	0.057
Severe	15 (7.28)	2 (13.3)	13 (86.7)	> 0.0001*
Extremely Severe	27 (13.11)	3 (11.1)	24 (88.9)	> 0.0001*
Stress, n (%)				
Normal	109 (53.4)	96 (88.1)	13 (11.9)	> 0.0001*
Mild	27 (13.2)	16 (59.3)	11 (40.7)	0.764
Moderate	28 (13.7)	9 (32.1)	19 (67.9)	0.0004*
Severe	27 (13.2)	6 (22.2)	21 (77.8)	> 0.0001*
Extremely Severe	13 (6.4)	0	13 (100)	> 0.0001*

Source: Written by the author *Statistically significant difference (p < 0.05).

Figure 1 shows the distribution of PTSD scores between men and women. Wilcoxon-Mann-Whitney test found a significant difference in PTSD symptoms intensity between the two groups (W = 4994, p = 0.018). Females had a higher score median than the males, indicating that women exhibit higher levels of PTSD symptoms.

Figure 2 presents the distribution of PTSD scores among different age groups, analyzed using the Kruskal-Wallis. The analyses of the age group influence in PTSD

scores revealed significant differences ($\chi^2(4) = 27.23, p < 0.0001$). The results showed that individuals aged between 30 and 39 years presented significantly higher PTSD scores than those aged between 40 and 49 years old (p = 0.008), 50 to 59 years old (p < 0.001) and ≥ 60 years old (p = 0.035). Other age group comparisons didn't show statistically significant differences after correction for multiple comparisons.

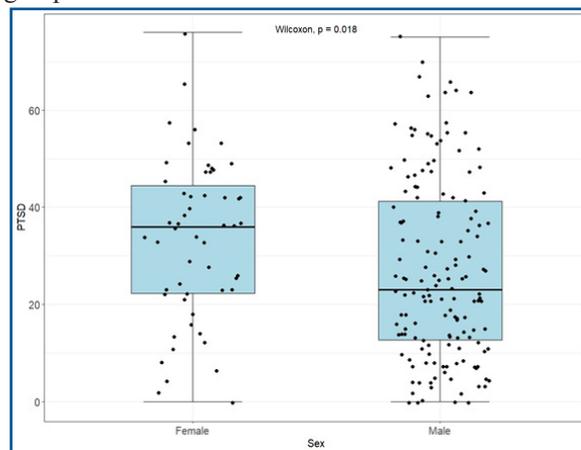


Figure 1: Distribution of PTSD symptom severity scores between men and women. Source: Written by the author

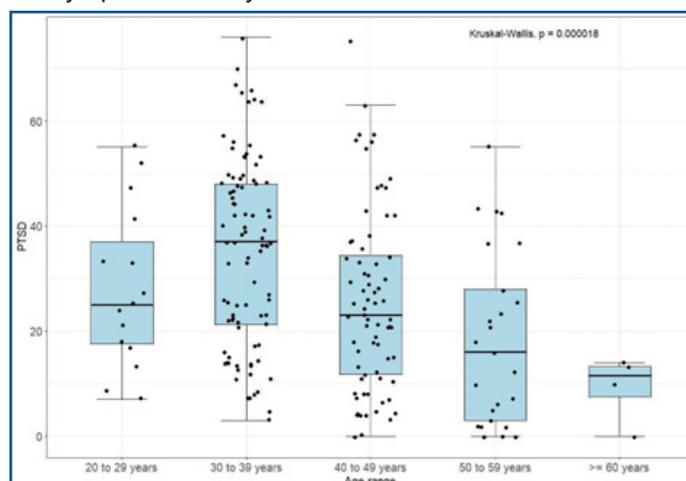


Figure 2: Distribution of PTSD scores across age groups. Source: Written by the author

Table 2 shows that determining sociodemographic factors for PTSD in the sample were age and sex. The analyses indicated that each added year in age was associated with a 3.3% lower prevalence of probable PTSD ($p=0.009$). The male sex was associated with the reduction of approximately 42% of PTSD prevalence ($p=0.006$).

The Kruskal-Wallis test shows that 30–39 age group differs significantly from the 40–49 age group ($p = 0.008$), the 50–59 age group ($p < 0.001$), and the ≥ 60 age

group ($p = 0.035$). PTSD: Post-Traumatic Stress Disorder.

The second model analyzed quality of life and lifestyle. The first being the determining factor for PTSD. For each one-unit increase in the quality of life score among public safety professionals in the psychological ($p = 0.001$) and environmental ($p = 0.028$) health domains, there was an associated decrease in PTSD prevalence by 2.35% and 1.69%, respectively (Table 3).

Table 2: Multivariate Poisson regression model with robust variance of sociodemographic factors associated with PTSD in public safety professionals.

Variables	PTSD Status	
	PR (95% CI)	P value
Age	0.97 (0.94 - 0.99)	0.009
Sex	0.58 (0.39 - 0.85)	0.006
Per Capita Income	1.0 (0.99 - 1.00)	0.177
Education Level	0.72 (0.46 - 1.09)	0.122

Source: Written by the author *Prevalence Ratio; 95% CI: 95% confidence interval. P-value 5% significance.

Table 3: Multivariate analysis model of lifestyle and quality of life factors associated with PTSD in public safety professionals.

Variables	PTSD Status	
	PR (95% CI)	P value
Tobacco use	0.92 (0.49 - 1.72)	0.802
Alcohol consumption	0.98 (0.69 - 1.38)	0.931
Physical activity	1.36 (0.95 - 1.93)	0.088
Physical health domain	1.00 (0.98 - 1.01)	0.767
Psychological health domain	0.98 (0.96 - 0.99)	0.001
Social relationships domain	1.00 (0.98 - 1.00)	0.692
Environmental health domain	0.98 (0.96 - 0.99)	0.028

Source: PR: Prevalence Ratio; 95% CI: 95% confidence interval. P-value for multivariate Poisson regression with robust variance at 5% significance.

The third multivariate model analyzed mental health condition factors, identifying stress as the determining factor for PTSD. Each one-point increase in

the stress score (DASS-21 scale) was associated with a 6% higher prevalence of probable PTSD among public safety professionals.

Table 4: Multivariate analysis model of mental health conditions among public safety professionals.

Variables	PTSD Status	
	PR (95% CI)	P value
Depression	1.02 (0.99 - 1.03)	0.118
Anxiety	1.00 (0.98 - 1.02)	0.712
Stress	1.06 (1.03 - 1.08)	>0.0001

Source: PR: Prevalence Ratio; 95% CI: 95% confidence interval. P-value for multivariate Poisson regression with robust variance at 5% significance.

DISCUSSION

Public safety professionals constitute a high-risk population for the development of mental health disorders due to the high-pressure work environment and exposure to traumatic events^{25,26}. This study assessed the prevalence of Post-Traumatic Stress Disorder (PTSD) and its associated factors in a sample of 206 public safety professionals.

Our results revealed a high prevalence of PTSD and showed that while higher stress symptom intensity and being female were strongly associated with greater PTSD

prevalence, factors such as older age and better quality of life in the psychological and environmental domains were associated with lower prevalence, outlining a multifactorial profile of vulnerability and protection in this population.

A high prevalence of probable PTSD was observed (37.4%), which exceeded the rates previously reported for the general population (1.3% to 12.2%)²⁷, even within this at-risk group. The global estimate of PTSD in police officers is 14.4%²⁸. A global cohort study reported that PTSD prevalence in firefighters ranged from 6.5% to

37.8%¹². Studies conducted with Brazilian public safety professionals show PTSD prevalence ranging from 8.9% to 26.7% among police officers^{14,29} and from 6.9% to 24.4% among firefighters^{30,31}.

This quantitative disparity underscores the severity of the mental health condition within the specific population of this study and substantiates an in-depth investigation of its determining factors. Furthermore, variability in PTSD prevalence rates among studies may be influenced by methodological differences, varying contexts, diagnostic criteria, cut-off points in assessment tools, and specific characteristics of the studied samples.

This study's findings identified stress intensity as the strongest associated factor, where increased stress intensity was linked to higher prevalence of PTSD symptoms. This result aligns with other studies that have demonstrated stress as a risk factor in the development and worsening of PTSD severity³², suggesting that stress plays a central role in exacerbating and maintaining post-traumatic symptoms in this population. The DASS-21 is a tool that assesses emotional states of stress, including manifestations such as perceived tension, irritability, difficulty relaxing, and emotional overload³³.

The association found between stress intensity and probable PTSD prevalence in our sample is consistent with the neurobiological literature. Public safety professionals are more exposed to conflict situations, trauma, and chronic stress^{34,35}. Chronic stress is known to alter regulation of the HPA axis (Hypothalamic–Pituitary–Adrenal axis), leading to dysfunction that impairs stress response and adaptation. Studies have shown that PTSD is associated with HPA axis dysfunction, hyperreactivity of the amygdala, poor regulation of the prefrontal cortex, and autonomic nervous system imbalance leading to heightened fear responses, impaired emotional regulation, and reduced stress resilience^{36–40}.

The results also showed a higher prevalence and intensity of probable PTSD in female public safety professionals, with being male associated with a 42% lower prevalence. This finding is consistent with substantial evidence from the general population, where a greater susceptibility to PTSD among women has been well-documented. This vulnerability is potentially mediated by a combination of factors, including differences in neurobiological responses to stress and higher exposure rates to specific types of institutional and interpersonal stress⁴¹.

Although studies with public safety professionals often do not show significant gender differences in PTSD prevalence, other studies do support our findings. A study with military police officers in Brazil showed that women and lower-ranking officers are more vulnerable to PTSD²⁹. Obuobi-Donkor *et al.*¹² also suggested that being female is a determining factor for PTSD. Similarly, Van der Meer *et al.*⁴² showed that female police officers experienced more PTSD symptoms, and with greater severity, in a sample of officers seeking treatment for trauma-related symptoms. Furthermore, the male problem-focused coping mechanism is regarded as a protective factor for PTSD⁴³.

The greater prevalence of PTSD in women is attributed to a significant biological basis, primarily

involving the differential effects of gonadal hormones in the modulation of both the physiological stress axis and cognitive fear-extinction pathways. The dysfunctional stress response system that is often exhibited in cases of PTSD is significantly modulated by estrogens, which contributes to a heightened HPA axis reactivity that is observed in females. These hormones also influence the brain's fear circuitry. The risk of developing PTSD or symptom exacerbation in women is highest during periods of low estrogen, such as specific phases of the menstrual cycle, puberty, the postpartum period, and the menopausal transition^{43,44}.

The higher PTSD prevalence observed in women may not reflect intrinsic vulnerability but rather the consequence of a cumulative burden from both operational and gender-specific institutional stressors. Women are more frequently exposed to specific traumatic events, including assault, moral and sexual harassment, workplace hostility, and discrimination^{29,41,42,45–47}. Therefore, this finding suggests that effective prevention policies must address trauma management and combat institutional challenges, such as gender-based harassment and discrimination.

The Poisson multivariate regression indicated that each additional year of age was associated with a 3.3% lower prevalence of probable PTSD. Literature data confirm a higher prevalence of PTSD among younger individuals^{48,49}. Analyses of populations with chronic exposure to trauma, such as the group of war veterans examined by Richardson *et al.*⁵⁰ and Konnert and Wong⁵¹ have shown that PTSD severity is associated with younger age among war veterans and lower levels of PTSD symptoms among older war veterans, supporting our results.

This possible protective effect may be explained by the fact that older adults tend to cope more positively with adversity, have greater adaptive capacity, and better cognitive reappraisal skills⁵². Yuan *et al.*¹³ suggested that, with time and experience, professionals accumulate a more effective repertoire of coping strategies, making them more resilient to new traumatic events. Furthermore, the possibility of individuals with greater susceptibility to PTSD do not remain in the profession long-term due and there are a selection process that concentrates the most resilient individuals.

Despite awareness of the risk, epidemiological data on PTSD prevalence and its interaction with multiple quality-of-life domains among public safety professionals in Brazil are scarce, specifically in the state of Espírito Santo. This study fills that gap and shows that better quality of life in the psychological and environmental domains reduces PTSD prevalence by 2.35% and 1.69%, respectively. Studies show that PTSD symptom severity is bidirectionally associated with worse quality of life across all domains, especially in social functioning, mental health, and physical well-being^{53–55}, and that improvements in quality of life are associated with reduced PTSD symptoms^{56,57}, corroborating our findings.

The environmental domain of the WHOQOL-BREF considers factors such as physical safety and sense of protection, the quality of the physical and social environment (e.g., noise, pollution, traffic, and climate),

and access to important resources (e.g., financial means, health services, transportation) and how these affect overall quality of life^{58,59}. The psychological domain includes aspects such as psychological distress, depression, anxiety, self-esteem, sense of purpose, spirituality, memory and concentration, and perceived control and autonomy⁶⁰. Studies have shown that job- and organization-related stress, the constant need for vigilance, exposure to potentially traumatic events, and sleep deprivation due to shift work negatively impact the psychological quality of life in public safety professionals^{61,62}.

Simultaneously analyzing quality-of-life domains in this population is extremely important because it reveals how stress correlates with perceptions of psychological and environmental quality of life. Quality of life has been widely studied by researchers, particularly for its potential impact in various life domains. Enhancing quality of life may represent a preventive and therapeutic strategy for treating mental disorders such as depression, anxiety, schizophrenia, and PTSD^{56,63-65}.

Some studies suggest that mindfulness-based interventions, stress management, and emotional intelligence training can improve quality-of-life perceptions and play a significant role in reducing PTSD symptoms^{66,67}.

This study has many limitations. The cross-sectional design does not allow for establishing causal relationships between determining factors and PTSD. It is also important to note that the screening questionnaire used is not a diagnostic tool, which is why the term “probable PTSD” is used. Future studies should employ longitudinal designs and collect data through semi-structured interviews.

CONCLUSION

Our results highlight the high prevalence of PTSD in the population of public security professionals and the association between emotional stress perception, the psychological and environmental domains of quality of life, and PTSD, as well as other intrinsic factors such as age and sex.

These findings reinforce the importance of developing public mental health policies aimed at public safety professionals, especially younger individuals and women. We suggest that such policies focus primarily on well-being, stress management, and early screening and diagnosis of mental disorders, and that they contribute to improving occupational and psychological quality of life, reducing stress, and preventing or supporting the recovery from PTSD in public safety professionals.

Author Contributions

A.R.B. conceptualized the study (Conceptualization). P.A.V.S., and I.A.A.M. performed the formal analysis (Formal analysis). S.O.M., B.R.Q., A.S.O., and M.L.M.S. interpreted the results (Interpretation). C.H.P.C., N.M.S.C., and A.M.A.S. prepared the tables and visualizations (Visualization). A.R.B., and P.A.V.S. drafted the manuscript (Writing – original draft). A.R.B., E.B.B., and A.M.A.S. critically reviewed and edited the manuscript (Writing – review & editing). All authors have read and approved the final version of the manuscript.

Funding

Secretaria Estadual de Segurança Pública do Espírito Santo SESP [contract no. 2021-35W6Q/UFES 23068.043639/2021]; Secretaria Nacional de Segurança Pública (SENASP); Espírito Santo Research and Innovation Support Foundation (FAPES) [PROFIX 12/2024- 2025H6GBH] and CARREFOUR [Diversity Call 2022 - number: 00035/2024].

Acknowledgments

We appreciate the support provided by SESP, COPAS, FUNDESP, FAPES, SENASP, FEST, and CNPq. We would also like to thank the Molecular Oncology Research Center, Barretos Cancer Hospital, São Paulo, Brazil. Our eternal gratitude to the EPIGENE research group team. We express our gratitude to all volunteers and the public safety professionals who participated in this study.

Conflicts of Interest

The authors declare that there is no conflict of interest. The funders had no role in study design, data collection and analysis, decision to publish, or manuscript preparation.

Orcid and e-mail Authors

^aORCID: 0000-0003-4935-5104; estercunha.bio@gmail.com;

^bORCID: 0000-0003-4594-9888; alineborcoi@gmail.com;

^cORCID: 0000-0002-6367-9482; pierreaugusto@gmail.com;

^dORCID: 0000-0001-8660-5139; suzannymendes@gmail.com;

^eORCID: 0000-0003-3407-4019; ivanaarantesm@gmail.com;

^fORCID: 0000-0002-3062-7619; barbararissequaioto@gmail.com;

^gORCID: 0000-0003-0717-6933; mandasgrancio@gmail.com;

^hORCID: 0000-0002-7364-8129; cele.lorenz@gmail.com;

ⁱORCID: 0000-0002-9494-8630; paganiicarlos@gmail.com;

^jORCID: 0000-0002-7397-4039; jussara.a.pereira@edu.ufes.br;

^kORCID: 0000-0001-6096-116X; joaquinogasparini@gmail.com;

^lORCID: 0009-0007-8974-1700; nathaliamariacampos@gmail.com;

^mORCID: 0000-0002-8773-3084; prof.drpedroluizferro@gmail.com;

ⁿORCID: 0000-0002-6217-6541; borloti@hotmail.com;

^oORCID: 0000-0002-8078-0304; adriana.biomol@gmail.com.

■ REFERENCES

1. Luz MP, Coutinho ESF, Berger W, Mendlowicz MV, Vilete LMP, Mello MF, et al. Conditional risk for posttraumatic stress disorder in an epidemiological study of a Brazilian urban population. *J Psychiatr Res.* 2016;72:51–7.
2. Bisson JI, Wright LA, Jones KA, Lewis C, Phelps AJ, Sijbrandij M, et al. Preventing the onset of post traumatic stress disorder. *Clin Psychol Rev.* 2021;86:102004.
3. Howie H, Rijal CM, Ressler KJ. A review of epigenetic contributions to post-traumatic stress disorder. *Dialogues Clin Neurosci.* 2019;21:417–28.
4. Al Jowf GI, Snijders C, Rutten BPF, de Nijs L, Eijssen LMT. The Molecular Biology of Susceptibility to Post-Traumatic Stress Disorder: Highlights of Epigenetics and Epigenomics. *Int J Mol Sci.* 2021;22:10743.
5. Schrader C, Ross A. A Review of PTSD and Current Treatment Strategies. *Mo Med.* 2021;118:546–51.
6. Al Jowf GI, Ahmed ZT, An N, Reijnders RA, Ambrosino E, Rutten BPF, et al. A Public Health Perspective of Post-Traumatic Stress Disorder. *Int J Environ Res Public Health.* 2022;19:6474.
7. Minayo MC de S, Adorno S. Risco e (in)segurança na missão policial. *Ciênc Saúde Coletiva.* 2013;18:585–93.
8. Isabirye RA, Namuli JD, Kinyanda E. Prevalence and factors associated with post traumatic stress disorder among field police patrol officers serving in Kampala Metropolitan region. *BMC Psychiatry.* 2022;22:706.
9. Steel C, Tehrani N, Lewis G, Billings J. Risk factors for complex posttraumatic stress disorder in UK police. *Occup Med.* 2021;71:351–7.
10. Stevelink SAM, Opie E, Pernet D, Gao H, Elliott P, Wessely S, et al. Probable PTSD, depression and anxiety in 40,299 UK police officers and staff: Prevalence, risk factors and associations with blood pressure. *Francis JM. PLOS ONE.* 2020;15:e0240902.
11. Craddock TB, Telesco G. Police Stress and Deleterious Outcomes: Efforts Towards Improving Police Mental Health. *J Police Crim Psychol.* 2022;37:173–82.
12. Obuobi-Donkor G, Oluwasina F, Nkire N, Agyapong VIO. A Scoping Review on the Prevalence and Determinants of Post-Traumatic Stress Disorder among Military Personnel and Firefighters: Implications for Public Policy and Practice. *Int J Environ Res Public Health.* 2022;19:1565.
13. Yuan C, Wang Z, Inslicht SS, McCaslin SE, Metzler TJ, Henn-Haase C, et al. Protective factors for posttraumatic stress disorder symptoms in a prospective study of police officers. *Psychiatry Res.* 2011;188:45–50.
14. Maia DB, Marmar CR, Metzler T, Nóbrega A, Berger W, Mendlowicz MV, et al. Post-traumatic stress symptoms in an elite unit of Brazilian police officers: Prevalence and impact on psychosocial functioning and on physical and mental health. *J Affect Disord.* 2007;97:241–5.
15. Renck B, Weisæth L, Skarbö S. Stress reactions in police officers after a disaster rescue operation. *Nord J Psychiatry.* 2002.
16. Osório FL, Silva TDAD, Santos RGD, Chagas MHN, Chagas NMS, Sanches RF, et al. Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): transcultural adaptation of the Brazilian version. *Arch Clin Psychiatry São Paulo.* 2017;44:10–9.
17. Pereira-Lima K, Loureiro SR, Bolsoni LM, Apolinario Da Silva TD, Osório FL. Psychometric properties and diagnostic utility of a Brazilian version of the PCL-5 (complete and abbreviated versions). *Eur J Psychotraumatology.* 2019 ;10.
18. The World Health Organization Quality of Life Assessment (WHOQOL): development and general psychometric properties. *Soc Sci Med* 1982. 1998;46:1569–85.
19. Fleck MP, Louzada S, Xavier M, Chachamovich E, Vieira G, Santos L, et al. Aplicação da versão em português do instrumento abreviado de avaliação da qualidade de vida “WHOQOL-bref”. *Rev Saúde Pública.* 2000;34:178–83.
20. Żołnierczuk-Kieliszek D, Kulik TB, Janiszewska M, Stefanowicz A. Influence of sociodemographic factors on quality of life in women living in Lublin Province in Poland. *Menopause Rev Menopausalny.* 2014;13:13–7.
21. Hugo FN, Hilgert JB, Da Luz Rosário de Sousa M, Cury JA. Oral status and its association with general quality of life in older independent-living south-Brazilians. *Community Dent Oral Epidemiol.* 2009;37:231–40.

22. Lovibond PF, Lovibond SH. The structure of negative emotional states: comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behav Res Ther.* 1995;33:335–43.
23. Vignola RCB, Tucci AM. Adaptation and validation of the depression, anxiety and stress scale (DASS) to Brazilian Portuguese. *J Affect Disord.* 2014;155:104–9.
24. R Core Team (2023) R A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna. - References - Scientific Research Publishing. Disponível em: <<https://www.scirp.org/reference/referencespapers?referenceid=3582659>>. Acesso em: 11 ago. 2025.25.
25. Violanti JM, Ma CC, Mnatsakanova A, Fekedulegn D, Hartley TA, Gu JK, et al. Associations Between Police Work Stressors and Posttraumatic Stress Disorder Symptoms: Examining the Moderating Effects of Coping. *J Police Crim Psychol.* 2018;33:271–82.
26. Heyman M, Dill J, Douglas R. The Ruderman white paper on mental health and suicide of first responders. *Ruderman White Pap Ment Health Suicide First Responders.* 2018;41.
27. Du J, Diao H, Zhou X, Zhang C, Chen Y, Gao Y, et al. Post-traumatic stress disorder: a psychiatric disorder requiring urgent attention. *Med Rev.* 2022;2:219–43.
28. Syed S, Ashwick R, Schlosser M, Jones R, Rowe S, Billings J. Global prevalence and risk factors for mental health problems in police personnel: a systematic review and meta-analysis. *Occup Environ Med.* 2020;77:737–47.
29. Dias Campos F, Chambel MJ, Lopes S, Dias PC. Post-Traumatic Stress Disorder in the Military Police of Rio de Janeiro: Can a Risk Profile Be Identified? *Int J Environ Res Public Health.* 2021;18:2594.
30. Bertolazi AN, Mann KC, Lima AVPB, Hidalgo MPL, John AB. Post-traumatic stress disorder prevalence and sleep quality in fire victims and rescue workers in southern Brazil: a cross-sectional study. *Public Health.* 2022;209:4–13.
31. Lima E de P, Assunção AÁ, Barreto SM. Transtorno de Estresse Pós-Traumático (TEPT) em Bombeiros de Belo Horizonte, Brasil: Prevalência e Fatores Ocupacionais Associados. *Psicol Teor E Pesqui.* 2015;31:279–88.
32. Yehuda R, Flory JD, Bierer LM, Henn-Haase C, Lehrner A, Desarnaud F, et al. Lower Methylation of Glucocorticoid Receptor Gene Promoter 1F in Peripheral Blood of Veterans with Posttraumatic Stress Disorder. *Biol Psychiatry.* 2015;77:356–64.
33. Bottesi G, Ghisi M, Altoè G, Conforti E, Melli G, Sica C. The Italian version of the Depression Anxiety Stress Scales-21: Factor structure and psychometric properties on community and clinical samples. *Compr Psychiatry.* 2015;60:170–81.
34. Lade S, Easterbrook B, Brown A, Millman H, D'Alessandro-Lowe AM, O'Connor C, et al. The mental health toll of service: an examination of self-reported impacts of public safety personnel careers in a treatment-seeking population. *Eur J Psychotraumatology.* 2023;14:2269696.
35. Wagner SL, White N, White M, Fyfe T, Matthews LR, Randall C, et al. Work outcomes in public safety personnel after potentially traumatic events: A systematic review. *Am J Ind Med.* 2024;67:387–441.
36. Bryant RA. Acute stress disorder as a predictor of posttraumatic stress disorder: a systematic review. *J Clin Psychiatry.* 2011;72:233–9.
37. Bryant RA, Creamer M, O'Donnell M, Forbes D, McFarlane AC, Silove D, et al. Acute and Chronic Posttraumatic Stress Symptoms in the Emergence of Posttraumatic Stress Disorder: A Network Analysis. *JAMA Psychiatry.* 2017;74:135–42.
38. Antonelli-Salgado T, Ramos-Lima LF, Machado C dos S, Cassidy RM, Cardoso T de A, Kapczinski F, et al. Neuroprogression in post-traumatic stress disorder: a systematic review. *Trends Psychiatry Psychother.* 2021;43:167–76.
39. Sbisa AM, Madden K, Toben C, McFarlane AC, Dell L, Lawrence-Wood E. Potential peripheral biomarkers associated with the emergence and presence of posttraumatic stress disorder symptomatology: A systematic review. *Psychoneuroendocrinology.* 2023;147:105954.
40. Musazzi L, Tornese P, Sala N, Popoli M. What Acute Stress Protocols Can Tell Us About PTSD and Stress-Related Neuropsychiatric Disorders. *Front Pharmacol.* 2018;9:758.
41. Tolin DF, Foa EB. Sex differences in trauma and posttraumatic stress disorder: A quantitative review of 25 years of research. *Psychol Trauma Theory Res Pract Policy.* 2008;S:37–85.
42. Van Der Meer CAI, Bakker A, Smit AS, Van Buschbach S, Den Dekker M, Westerveld GJ, et al. Gender and Age Differences in Trauma and PTSD Among Dutch Treatment-Seeking Police Officers. *J Nerv Ment Dis.* 2017;205:87–92.

43. Kornfield SL, Hantsoo L, Epperson CN. What Does Sex Have to Do with It? The Role of Sex as a Biological Variable in the Development of Posttraumatic Stress Disorder. *Curr Psychiatry Rep.* 2018;20:39.
44. Lehner M, Skórzewska A, Wisłowska-Stanek A. Sex-Related Predisposition to Post-Traumatic Stress Disorder Development—The Role of Neuropeptides. *Int J Environ Res Public Health.* 2022;19:314.
45. Goldstein RB, Smith SM, Chou SP, Saha TD, Jung J, Zhang H, et al. The epidemiology of DSM-5 posttraumatic stress disorder in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions-III. *Soc Psychiatry Psychiatr Epidemiol.* 2016;51:1137–48.
46. Lehavot K, Goldberg SB, Chen JA, Katon JG, Glass JE, Fortney JC, et al. Do trauma type, stressful life events, and social support explain women veterans' high prevalence of PTSD? *Soc Psychiatry Psychiatr Epidemiol.* 2018;53:943–53.
47. Schein J, Houle C, Urganus A, Cloutier M, Patterson-Lomba O, Wang Y, et al. Prevalence of post-traumatic stress disorder in the United States: a systematic literature review. *Curr Med Res Opin.* 2021;37:2151–61.
48. Shrira A, Palgi Y. Age differences in acute stress and PTSD symptoms during the 2023 Israel-Hamas war: Preliminary findings. *J Psychiatr Res.* 2024;173:111–4.
49. Carmona L, Camilo C, Carvalho VS, Chambel MJ. Post-traumatic stress disorder in peacekeepers: a systematic literature review and meta-analysis. *Eur J Psychotraumatology.* 2024;15:2413735.
50. Richardson JD, Naifeh JA, Elhai JD. Posttraumatic Stress Disorder and Associated Risk Factors in Canadian Peacekeeping Veterans with Health-Related Disabilities. *Can J Psychiatry.* 2007;52:510–8.
51. Konnert C, Wong M. Age differences in PTSD among Canadian veterans: age and health as predictors of PTSD severity. *Int Psychogeriatr.* 2015;27:297–304.
52. Padmanabhanunni A, Pretorius T. Demographic Factors, COVID-19-related Factors, and PTSD Symptom Clusters: Exploring Associations and Implications for Mental Health. *OBM Neurobiol.* 2023;7:1–17.
53. Doctor JN, Zoellner LA, Feeny NC. Predictors of Health-Related Quality-of-Life Utilities Among Persons With Posttraumatic Stress Disorder. *Psychiatr Serv.* 2011;62:272–7.
54. Pagotto LF, Mendlowicz MV, Coutinho ESF, Figueira I, Luz MP, Araujo AX, et al. The impact of posttraumatic symptoms and comorbid mental disorders on the health-related quality of life in treatment-seeking PTSD patients. *Compr Psychiatry.* 2015;58:68–73.
55. Presciutti A, Meyers EE, Reichman M, Vranceanu AM. Associations Between Baseline Total PTSD Symptom Severity, Specific PTSD Symptoms, and 3-Month Quality of Life in Neurologically Intact Neurocritical Care Patients and Informal Caregivers. *Neurocrit Care.* 2021;34:54–63.
56. Calderbank A, Gray C, Morgan-Boon A, Reuber M. Changes in Posttraumatic Stress Disorder Symptoms With Integrative Psychotherapy for Functional Neurological Symptom Disorder. *J Neuropsychiatry Clin Neurosci.* 2023;35:398–403.
57. Schnurr PP, Lunney CA. Symptom Benchmarks of Improved Quality of Life in Ptsd. *Depress Anxiety.* 2016;33:247–55.
58. Gagliardi J, Brettschneider C, König HH. Health-related quality of life of refugees: a systematic review of studies using the WHOQOL-Bref instrument in general and clinical refugee populations in the community setting. *Confl Health.* 2021;15:44.
59. Skevington SM, Epton T. How will the sustainable development goals deliver changes in well-being? A systematic review and meta-analysis to investigate whether WHOQOL-BREF scores respond to change. *BMJ Glob Health [Internet].* 2018 [citado 18 de julho de 2025];3. Disponível em: https://gh.bmj.com/content/3/Suppl_1/e000609
60. Sifaka V, Mavridis D, Tsonis O, Tzamakou E, Christogiannis C, Tefa L, et al. The WHOQOL-BREF instrument: Psychometric evaluation of the Greek version in patients with advanced cancer and pain and associations with psychological distress. *Palliat Support Care.* 2024;22:698–708.
61. Short JL. Predicting Mental Health Quality of Life in Policing: Officers and Civilians. *J Police Crim Psychol.* 2021;36:276–87.
62. Stelnicki AM, Jamshidi L, Fletcher AJ, Carleton RN. Evaluation of Before Operational Stress: A Program to Support Mental Health and Proactive Psychological Protection in Public Safety Personnel. *Front Psychol.* 2021;12:511755.
63. Hohls JK, König HH, Quirke E, Hajek A. Anxiety, Depression and Quality of Life-A Systematic Review of Evidence from Longitudinal Observational Studies. *Int J Environ Res Public Health.* 2021;18:12022.
64. Lisincki AM, Csizmadia L, Szabó FÁ, Réthelyi J, Jekkel É. Quality of life and objective-subjective functionality in individuals with schizophrenia. *Eur Psychiatry.* 2024;67:S723–S723.

65. Wilmer MT, Anderson K, Reynolds M. Correlates of Quality of Life in Anxiety Disorders: Review of Recent Research. *Curr Psychiatry Rep.* 2021;23:77.
66. Qian J, Wang W, Sun S, Liu L, Sun Y, Yu X. Interventions to reduce post-traumatic stress disorder symptoms in health care professionals from 2011 to 2021: a scoping review. *BMJ Open.* 2022;12:e058214.
67. Possemato K, Bergen-Cico D, Buckheit K, Ramon A, McKenzie S, Smith AR, et al. Randomized Clinical Trial of Brief Primary Care-Based Mindfulness Training Versus a Psychoeducational Group for Veterans With Posttraumatic Stress Disorder. *J Clin Psychiatry.* 2022;84:22m14510.

Resumo

Introdução: o transtorno de estresse pós-traumático (TEPT) é um problema de saúde pública que pode se originar da exposição a eventos traumáticos. Apesar da alta taxa de exposição a traumas na população geral, apenas parte desenvolve o transtorno. Profissionais de segurança pública estão entre os mais vulneráveis, apresentando riscos significativos à qualidade de vida, desempenho ocupacional e saúde mental, influenciados por fatores sociodemográficos e psicossociais. Contudo, ainda são escassos os dados sobre a prevalência e os fatores determinantes do transtorno de estresse pós-traumático nessa população.

Objetivo: avaliar a prevalência de transtorno de estresse pós-traumático e identificar os fatores associados ao seu desenvolvimento em profissionais de segurança pública.

Método: estudo transversal com 206 profissionais de segurança pública do Espírito Santo, Brasil. Foram incluídos participantes que consentiram e excluídos aqueles com respostas ausentes no PCL-5. Os dados dos questionários socioeconômico, WHOQOL-BREF, DASS-21 e PCL-5, foram coletados presencialmente, considerando-se escore ≥ 36 como indicativo de provável TEPT. Foram utilizados testes não paramétricos, regressão de Poisson com variância robusta e qui-quadrado, utilizando R, SPSS e STATA. O Comitê de Ética da Universidade do Espírito Santo aprovou o estudo (nº5.382.872/2022).

Resultado: 37.4% possuem indicativo de provável transtorno de estresse pós-traumático. A mediana de idade foi 39 anos e 73.8% eram do sexo masculino e 62.6% da Polícia Militar. A idade mais avançada, ser do sexo masculino e uma maior qualidade de vida nos domínios psicológico e ambiental, foram associados a menor prevalência de transtorno de estresse pós-traumático. A maior intensidade dos sintomas de estresse foi associada a maior prevalência de transtorno de estresse pós-traumático

Conclusão: os nossos resultados evidenciam a associação entre sexo, idade, percepção do estresse emocional, os domínios psicológicos e ambientais da qualidade de vida e transtorno de estresse pós-traumático, reforçando a necessidade de políticas públicas de saúde mental focadas em rastreamento e diagnóstico precoce, no bem-estar e gestão do estresse.

Palavras-chave: Transtorno de Estresse Pós-traumático, Qualidade de Vida, Saúde Mental, Fatores de Risco, Policiais.

©The authors (2025), this article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated.