

Prevalence and causes of Leave for Health Treatment (LTS) among Military Police in the state of Ceará

 <https://doi.org/10.56238/devopinterscie-274>

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ABSTRACT

The work of military police (PMs) around the world involves risking their own lives in favor of defending the lives of others, implying a constant state of alert. This context, added to the work overload and the rigid relations of the corporation's military hierarchy, can negatively affect the quality of life and health conditions of these workers. Paying attention to sick leave for health treatment is important, as work plays a fundamental role in building each individual's identity and may be related to the causes that incapacitate workers. **OBJECTIVES:** To describe the prevalence and identify the main causes of sick leave (LTS). **METHODOLOGY:** Cross-sectional, exploratory, quantitative study, part of an umbrella project entitled "Experienced violence, health

conditions and illness among civil and military police officers in the State of Ceará", carried out in 21 Military Police Battalions in the cities of Fortaleza, Quixadá, Sobral, and Canindé, in Ceará, between 2018 and 2020, with a total of 836 police officers. For data collection, a self-administered electronic questionnaire was used, using the Survey Monkey software, containing a Free and Informed Consent Form (TCLE). The analysis was performed using SPSS®20. The study was approved by COPESQ UFC Opinion No. 2,284,725. **RESULTS:** Most of the sample was male (91.1%), with a mean age of 39 ± 10 years, brown (70.3%), and living in a stable union (65.7%). Most reported having already taken the LTS at some point during their work at the Ceará Military Police (63.0%). the following stand out: illnesses (39.9%) and accidents (10.5%), followed by psychological issues (4%), surgeries (2.9%), and injuries (2.3%). The lower limbs are the most affected part of the body (3.5%). **CONCLUSION:** LTS was necessary for most PMs and its main causes show that factors internal and external to the profession may be related to the need for leave. It is concluded, therefore, that the exercise of the profession contributes to the health-illness process of these individuals, limiting the good performance of their activities and impairing their quality of life.

Keywords: Health surveillance, Epidemiology, Professional diseases.

1 INTRODUCTION

Police work involves taking risks in defense of the lives of others, implying a constant state of alert, even outside working hours (COSTA et al., 2020). This context, added to work overload and conflicting relationships with society, can negatively affect the quality of life and health conditions of these workers (MAIA, ASSIS & MINAYO, 2022). Specifically in the Military Police (PM), stress can be even higher, due to the nature of the work and the rigid hierarchical relations of the corporation (SOUZA et al., 2012).

It is already known that dissatisfaction with work, high physical and psychological demands, and loss of quality of life are risk factors for common mental disorders (CMD), which are among the main causes of Leave for Health Treatment (LTS) in public servants (BAASCH, TREVISAN & CRUZ, 2017). In addition, a stressful job can lead to musculoskeletal disorders and pain, such as temporomandibular disorders (TMD) (URBANI, JESUS & COZENDEY-SILVA, 2019).

These characteristics are intrinsic to the police service, proving that this class is vulnerable to injuries arising from the profession (SENA, 2022). Thus, since PM is an essential service, it is important to pay attention to LTS and its causes. Since work plays a fundamental role in building each individual's identity (FERNANDES & ZANELLI, 2006), police activity is largely associated with the illness of its professionals (SANTOS et al., 2021).

In Brazil, there is a scarcity of studies that investigate the causes of absence from work among military police officers. Therefore, this study aimed to find the prevalence and main causes of LTS among military police officers in the state of Ceará, relating them to the exercise of police activity.

2 METHODOLOGY

This is a cross-sectional, exploratory study with a quantitative approach, extracted from an umbrella project entitled "Experienced Violence, health conditions and Illness among Civil and military police officers in the State of Ceará", linked to the Department of Physiotherapy and the Program Postgraduate Program in Public Health at the Federal University of Ceará – UFC.

The sample consisted of 734 Military Police, belonging to the General Ostensive Policing or the Specialized Police. The present study addressed 27 Battalions of the Military Police of the state of Ceará, including Fortaleza and the metropolitan region. The following inclusion criteria were chosen: individuals of both sexes, ineffective exercise for at least six months. Police officers who were on mandatory vacation, temporary leave from duty, and on leave during the study period were excluded.

For data collection, a self-administered electronic questionnaire was used, sent via email or WhatsApp to the research participants, using the Survey Monkey software, containing the Free and Informed Consent Form (TCLE). To preserve confidentiality and increase the possibility of reliable responses, individuals received an individual code, which made it impossible to identify the person.

The questionnaire addressed general data such as age, sex, race, education, and marital status, and also addressed issues related to physical activity and health perceptions, in addition to investigating the prevalence of LTS, its causes, and symptoms.

For data analysis, the database was downloaded in Excel format from the Survey Monkey platform, which was analyzed using SPSS® software version 20.0.

For a better analysis of the results, a grouping of variables was performed in the results referring to the LTS, specifically, referring to the affected body site and the signs and symptoms.

Regarding the affected body sites, under "head", dysfunctions in the head region were considered, which include Temporomandibular Disorders (TMD), and dental and ophthalmological problems (glaucoma and visual impairment). In "upper limbs", we considered the bones of the appendicular skeleton of the upper limb, including the shoulder girdle. In "lower limbs", we considered the bones of the appendicular skeleton of the lower limb, including the pelvic girdle. In "mental", psychic problems, anxiety, and depression were considered.

Regarding signs and symptoms, "algia" included muscle strain, sprain, infection, inflammation, burn, tendon/ligament rupture, and nonspecific pain.

The research followed the recommendations contained in Resolution 466/12 of the National Health Council (CNS), regarding ethics in research involving human beings, and was approved by the Research Ethics Committee (CEP) under Opinion No. 2,284,725.

3 RESULTS

The sample of this study consisted mostly of men (90.9%, n=667), between 31 and 40 years old (44.1%, n=324), mixed race (70.4%, n=517), married or in a stable union (66.8%, n=490), with complete or incomplete higher education (76.2%, n=476). (TABLE 1)

TABLE 01

Tabela 01 - Características Sociodemográficas dos Policiais Militares da Secretaria de Segurança Pública do estado do Ceará, município Fortaleza, 2021.

Variáveis	n/N	%
Sexo		
Masculino	667/734	90,9
Feminino	67/734	9,1
Idade		
Até 30	175/734	23,8
31 a 40	324/734	44,1
41 ou mais	235/734	32,0
Cor da pele		
Preta	45/734	6,1
Parda	517/734	70,4
Branca	160/734	21,8
Indígena	12/734	1,6
Situação Conjugal		
Solteiro (a) e sem parceiro (a) fixo (a)	58/734	7,9
Solteiro (a), com parceiro (a) fixo (a)	150/734	20,4
Casado (a) ou em união estável	490/734	66,8

Separado (a), desquitado (a), divorciado (a) ou viúvo (a)	36/734	4,9
Grau de instrução		
Ensino fundamental completo	4/734	0,5
Ensino médio incompleto	9/734	1,2
Ensino médio completo	162/734	22,1
Superior incompleto	184/734	25,1
Superior completo	292/734	39,8
Especialização	79/734	10,8
Mestrado	4/734	0,5

Fonte: Autoria própria, 2021.

Regarding physical activity, 81.7% (n=485) practice 4 or fewer days a week and 84.3% (n=619) consider it very important. Perceptions about general, oral, and mental/emotional health status are considered good (51.2%, n=376; 54.1%, n=397 and 43.9%, n=322 respectively), but 10, 8% (n=79) consider their mental/emotional health to be poor and 34.5% (n=252) claim to have frequent headaches. (TABLE 2)

TABLE 02

Tabela 02 - Atividade física e percepção de saúde entre os Policiais Militares da Secretaria de Segurança Pública do estado do Ceará, município Fortaleza, 2021.

Variáveis	n/N	%
Frequência da prática de atividade física/esporte		
1 a 2 dias por semana	196/594	33,0
3 a 4 dias por semana	289/594	48,7
5 a 6 dias por semana	99/594	16,7
Todos os dias (incluindo sábado e domingo)	10/594	1,7
Percepção da importância da atividade física		
Muito importante	619/734	84,3
Mais ou menos importante	94/734	12,8
Pouco importante	21/734	2,9
Percepção do estado de saúde		
Ótimo ou muito bom	143/734	19,5
Bom	376/734	51,2
Regular	194/734	26,4
Ruim ou muito ruim	21/734	2,9
Percepção da saúde bucal (dentes e gengiva)		
Ótimo ou muito bom	135/734	18,4
Bom	397/734	54,1
Regular	178/734	24,3
Ruim ou muito ruim	24/734	3,3
Percepção da saúde mental/emocional		
Muito boa	86/734	11,7
Boa	322/734	43,9
Regular	247/734	33,7

Ruim	79/734	10,8
Cefaleia frequente		
Sim	252/734	34,5
Não	482/734	65,7

Fonte: Autoria própria, 2021.

LTS was required for 62.5% (n=454) of the officers who participated in the study. For 37.2% (n=169) it was necessary only once, for 24.0% (n=109), twice, and for 16.1% (n=73) five times or more. The length of absence was greater than one year for 6.8% (n=31) of the police officers, less than one month for 34.0% (n=154), and between 1 and 3 months for 33.6% (n= 152).

Most police officers requested LTS more than one year ago (57.8%, n=262). The main causes were diseases (39.9%, n=293) and accidents (10.5%, n=77), followed by psychological issues (4%, n=29), surgeries (2.9%, n= 21), and injuries (2.3%, n=17), with the lower limbs being the most affected body part (3.5%, n=26), followed by the head (1.9%, n=14) and upper limbs (1.2%, n=9). However, 25.9% (n=190) stated that the condition was not specific to any part of the body.

Pain (17.7%) and fracture (11.6%) were the most frequent symptom and signs.

TABLE 03

Tabela 03 - Licenças para Tratamento de Saúde e principais causas autorreferidas pelos Policiais Militares da Secretaria de Segurança Pública do estado do Ceará, 2021.

Variáveis	n/N	%
Licença para Tratamento de Saúde (LTS)		
LTS durante trabalho na polícia	454/726	62,5
Número de LTS tiradas		
Uma	169/454	37,2
Duas	109/454	24,0
Três	80/454	17,6
Quatro	23/454	5,1
Cinco ou mais	73/454	16,1
Tempo de afastamento por LTS		
Menos de 1 mês	154/453	34,0
1 a 3 meses	152/453	33,6
3 a 6 meses	66/453	14,6
6 meses a 1 ano	50/453	11,0
Mais de 1 ano	31/453	6,8
Há quanto tempo solicitou LTS		
Menos de 1 mês	46/453	10,2
1 a 3 meses	47/453	10,4
3 a 6 meses	45/453	9,9
6 meses a 1 ano	53/453	11,7
Mais de 1 ano	262/453	57,8
Causa da solicitação da LTS		
Acidentes	77/734	10,5
DTM*	7/734	1,0
Cirurgia	21/734	2,9
Doença	293/734	39,9
Lesão	17/734	2,3
Psíquico	29/734	4,0

Neoplasia	2/734	0, 3
Outros	33/734	0, 4
Local do corpo afetado		
Cabeça	14/734	1, 9
Tronco	6/734	0, 8
MMSS [#]	9/734	1, 2
MMII ^{&}	26/734	3, 5
Sistema Digestório	5/734	0, 7
Sistema Urinário	4/734	0, 5
Sistema Reprodutor	1/734	0, 1
Sistema Vestibular	1/734	0, 1
Sistema Tegumentar	1/734	0, 1
Sistema Endócrino	1/734	0, 1
Não especificado	190/734	25, 9
Sinais e sintomas autorreferidos		
Algia	130/734	17, 7
Ferimento	16/734	2, 2
Fratura	85/734	11, 6
Nenhum	503/734	68, 5

Fonte: Autoria própria, 2021.

Legenda: *Disfunção Temporomandibular. #Membros Superiores. &Membros Inferiores.

4 DISCUSSION

This study found that Ceará's military police were mostly men, aged between 31 and 40 years, self-declared brown, married or living in a stable relationship, with complete or incomplete higher education. Regarding physical activity, although the majority consider it very important, a third practice it less than 3 times a week.

These data corroborate the findings of surveys that investigated police officers from other states, revealing that there may be some pattern between the general characteristics of the Military Police. Minayo, Souza, and Constantino (2008) found only 7.5% of women among police officers in Rio de Janeiro and the most prevalent age group was between 36 and 45 years. The most self-declared race was "black/brown" and the majority lived in a stable relationships. About the practice of physical activity, about 40% said they practice it 1 to 3 times a week. Santos et al. (2021) also found similar characteristics among military police officers in Paraná in terms of gender, age, education, and marital status, as well as Arroyo, Borges, and Lourenção (2019), who also found similarities among police officers in the state of São Paulo.

Although the police profession is a risky profession, with potential damage to health (SANTOS et al., 2021), the perception of military police officers about their health is good, both general and oral and mental. However, a large portion considers their mental/emotional health to be poor, and "frequent headache" was reported by more than a third of the sample.

This satisfaction with health does not represent a good quality of life, as it is known that police work is physically and mentally exhausting (SANTOS et al., 2021; ARROYO, BORGES & LOURENÇÃO, 2019). Exposure to violence experienced daily by these professionals predisposes them to psychological conditions, such as post-traumatic stress disorder, anxiety, and depression. In addition, other factors

negatively interfere with the quality of life: dissatisfaction with salary, rigid hierarchy, the unpredictability of actions that require high emotional control, the constant risk of death, and also ergonomic risks due to the continuous handling of weapons. (SENA, 2022).

Satisfaction with the state of health may represent the negligence of these professionals regarding their health and the difficulty in recognizing that physical fatigue and stress negatively impact their quality of life (ARROYO, BORGES & LOURENÇÃO, 2019). Many police officers live with systemic arterial hypertension, are overweight, have frequent headaches, sinusitis, chronic gastritis, constipation, and urinary and fecal incontinence, in addition to having unhealthy lifestyles, with poor diet, sedentary lifestyles and poor sleep quality (MINAYO, SOUZA & CONSTANTINO, 2008).

Another point that supports the inconsistency of satisfaction with the state of health is that the LTS was necessary for three-fifths of the police officers who participated in the study, representing more than half of the sample. Of these, a significant number claimed to have already taken 4 or more LTS throughout service and most took between 1 or 2 times. The most prevalent time away from work was between 1 and 3 months, however, about 7% had to be away from work for more than a year. More than half of the LTS was needed more than 1 year ago, but there are more recent reports.

The main causes of LTS found were: diseases, accidents, psychic symptoms, surgery, injuries, and TMD. The main body sites affected were: the lower limbs, head, and upper limbs, but most stated that the condition was not specific to any part of the body. Pain and fracture were the most self-reported signs and symptoms and more than half stated that their condition had no symptoms.

Accidents and psychic symptoms are among the three main reasons for LTS, and it can be said, therefore, that the health of military police officers is strongly related to their work (SANTOS et al., 2021). Between 2015 and 2017, the violence suffered due to work (gunshots and car accidents, for example) caused the removal of more than 3,000 police officers (SENA, 2022). In addition, there is a large number of police officers who take time off work due to psychological problems and the suicide and suicide attempt statistics of these professionals are also expressive (DIAS, SIQUEIRA & FERREIRA, 2023).

Frequent headaches, reported by a third of the police officers in this study, burnout, and common mental disorders (CMD) are caused by physical and mental exhaustion, mainly at work (MINAYO, SOUZA & CONSTANTINO, 2008). Frequent headaches may also be related to TMD and overloads on the cervical and dorsal muscles (CRUZ; CRUZ; CRUZ; CAMARGO, 2017). CMD symptoms include insomnia, fatigue, irritability, and forgetfulness, among others (BRAVO et al., 2022), and are among the main causes of absence from work (BAASCH, TREVISAN & CRUZ, 2017). High physical demand, precarious working conditions, high psychological demand, and low control over work are identified as risk characteristics for the development of CMD (BAASCH, TREVISAN & CRUZ, 2017), which are intrinsic to the police service (SENA, 2022).

Among police officers in Rio de Janeiro, the LTS grew 95.5% among officers and 108.3% among privates, in a period of 4 years (2000 to 2004). Since soldiers are at the forefront of confrontations, these

data show, once again, that police activity is related to absence from work (MINAYO, SOUZA & CONSTANTINO, 2008).

It is also known that the length of leave is inversely proportional to the possibilities of return, implying personal and institutional, social, and economic losses (BAASCH, TREVISAN & CRUZ, 2017). In this study, about 7% needed LTS for 1 year or more, therefore, they had lower expectations of returning to their activities.

Psychic symptoms may have been described as affecting the head or no specific body part. Illnesses and accidents, being the most prevalent causes, are the most likely to have been reported as affecting specific body parts and systems. The lower limbs, as they support body weight (HALL, 2016), are the most affected due to equipment overload and lack of training (PELEGRINI; CARDOSO; CLAUMANN; PINTO et al., 2018).

As a limitation of the analysis of variables related to LTS, the vast majority indicated the cause, however, without specifically reporting the affected site and the self-reported signs and symptoms.

Another limitation is the subjectivity of the responses and the lack of sufficient specification for a deeper analysis, making it important that future studies can investigate LTS and its causes more specifically and clearly.

5 CONCLUSION

Therefore, LTS was necessary for most military police officers in Ceará and the indicated causes showed that factors inherent to the profession may be related to removal. Paying attention to such data can help improve the health care of these professionals, improving their quality of life and reducing the need for LTS.

Based on studies like this one, it is possible to identify the main causes of leave and seek measures to reduce them, through interventions that promote the improvement of working conditions that interfere with health and quality of life, such as a reduction in working hours, improved equipment ergonomics, and better remuneration, for example.

More studies are needed to investigate the possible consequences of the disorders that caused the leave, the quality of the return to work, the need for new LTS due to the same causes, and other possible consequences.

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