Regular practice of physical activity and its relationship with the health conditions of military police officers in a city in northern Brazil

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ABSTRACT

The process of globalization with the increase in technology and the growing demand presented by society, has partially modified the service provided by the military police, who are forced to respond faster and more effectively, under penalty of not being able to guarantee quality security service to the population. The objective of this study was to verify the regular practice of physical activity and its relationship with the health conditions of the military police of the general assistance battalions, traffic battalion and internal affairs of the state of Rondônia. This is a cross-sectional study conducted with 96 military police officers from the general assistance, traffic battalion and internal affairs battalions of the state of Rondônia. Anthropometric measurements of body weight, body height, waist circumference were used, after calculating the body mass index and waist-to-hip ratio. For the questions about eating habits and physical activity, an analog scale elaborated by the researcher himself was adopted: Their daily eating habits are adequate with the following requirements: three meals a day: breakfast, lunch and dinner at breakfast he eats fruits and at lunch vegetables daily, inadequate when he does not meet the requirements. For physical activity, the following question was

elaborated: Practice regular physical activity at least 30 minutes twice a week? Yes or no. The prevalence of non-practice of regular physical activity was 46.9%, males 73.3%, females 26.7%. The associated factors were: being hypertensive in 62.5% (PR=1.34; CI95%: 1.13-1.60), being obese 78.9% (PR=1.44; 95%CI: 1.30-1.60), presence of cardiovascular risk by waist measurement 76.3% (PR=1.67; 95%CI: 1.40-1.98), inadequate eating habits 65.6% (PR=1.66; 95%CI: 1.40-1.97). The findings showed a high prevalence of subjects who self-reported not practicing physical activity regularly, the risk factors were hypertension, obese, high waist circumference and inadequate diet. Institutional policies to combat the control of arterial hypertension, obesity and the presence of cardiovascular risks, should be invested in the implementation of physical activity programs by qualified professionals, in order to improve the quality of life of these military police officers.

Keywords: Physical activity, Obesity, Cardiovascular diseases.

1 INTRODUCTION

Physical activity (PA) is considered a protective factor with the advancement of a sedentary lifestyle in all life cycles, and this is well documented in the literature (PEIXOTO et al., 2018, GALLOZA et al., 2017, CUNNINGHAM et al., 2020, KLEIS et al., 2021), as the practice of PA is an effective means to control and reduce sedentary lifestyle and risk for the development of chronic diseases, and improved quality of life.

The globalization process, with the increase in technology and the growing demand presented by society, has partially modified the service provided by the military police (PM), who are forced to respond more and more quickly and effectively, under penalty of not being able to guarantee quality security care to the population (FERREIRA et al., 2020). In this sense, it is evident the need to carry out and report on the proposal of this study, with a view to contemplating the defense of the health of public security professionals.

Due to the very characteristic of the MP professional, physical conditions appear as one of the essential requirements, taking into account the need to control the morphological and functional parameters of the individual (OLIVEIRA et al., 2010). For this, it is necessary to include as a simple and inexpensive aspect the use of body composition measurements (morphological) and health-related physical fitness tests (joint flexibility, muscle strength and endurance and cardiorespiratory endurance), as these aspects are directly related to the characteristics of the extensive service of the MP.

Military police officers need a high quality of life index associated with health and adequate physical activity to achieve satisfactory levels in their profession, in addition, they also need to be in good work capacity and physical fitness, as military police officers in general tend to have greater physical, psychological and cognitive wear than other workers in other functions (DE OLIVIERA et al., 2015, OLIVEIRA et al., 2018, JESUS, JESUS, 2012).

In the armed forces for career military personnel and in the PM auxiliary forces in their regiments, there is already the famous Physical Fitness Test (TAF), which aims to verify whether the

police officer is able to perform military police missions on a daily basis, and is an evaluative criterion for promotions and to attend various courses (FERRARINI, 2023, CAETANO et al., 2020,).

The importance of regular physical activity as a protective factor against health disorders such as depression, anxiety, and stress is well documented in the literature (CHRISTOFOLETTI et al., 2022, GUTHOLD et al., 2018, ALTHOFF et al., 2017). Due to the very performance of conflicts of violence in society, the MP are exposed to extreme situations, often causing mental disorders, requiring leave from the service, and treatment with psychiatrist, psychological specialists and welcoming of family members.

Police activity is stressful and dangerous, since its professionals deal with situations of violence, accidents and death on a daily basis, and at the same time they are subjected to strenuous, long-term work shifts. In addition, police work occasionally involves performing extremely demanding physical tasks, such as chasing fleeing suspects, jumping over obstacles, controlling arrest resistance, and moving injured individuals (JESUS, JESUS, 2012).

It is also noteworthy that these professionals perform their activities transporting loads with protective equipment that can exceed 20 kg. In this general context, police work has been associated with a high prevalence of cardiovascular diseases, including metabolic syndrome and musculoskeletal injuries, thus generating an increase in cases of absenteeism, morbidity, and disability (MARINS et al, 2020).

A systematic review study with military police officers shows the importance and benefits of regular physical activity in the impact of a strategy to prevent mental disorders and has been considered as a protective factor against cardiovascular diseases (MARINHO et al., 2018, DE OLIVEIRA et al., 2015).

Thus, the objective of this study was to verify the regular practice of physical activity and its relationship with the health conditions of military police officers in the city of Porto Velho, RO, 2023.

2 METHOD

This is a descriptive observational study with a cross-sectional design and a quantitative approach. This is a descriptive observational study with a cross-sectional design and a quantitative approach. The sampling technique was non-probabilistic for convenience, the study had 96 military police officers from the general assistance battalions, traffic battalion and internal affairs battalions of the state of Rondônia according to the availability of the participant, the inclusion criteria were: to carry out their operational activities, to participate in all stages of data collection. Military Police officers who presented the following characteristics were excluded: - were on vacation, were on leave for health treatment, were on special leave.

Anthropometric variables were evaluated in all subjects: body height, body mass, body mass index (BMI), waist circumference (WC), waist-to-hip ratio (WHR), Waist-to-hip ratio (WHR), Waist and hip ratio (WHR). removed, the instrument used was a wall-mounted manual stadiometer. Body mass was measured at approximately 100 g using a calibrated Toledo digital electronic scale with the individual standing wearing only underwear. BMI was calculated as CM/EC squared (kg/m2) and was classified into three categories: normal weight (BMI 18.5-24.9 kg/m2), overweight (BMI 25.0-29.9 kg/m2) and obese (BMI > 30.0 kg/m2) (WHO, 2015). The circumferences were measured to the millimeter using a flexible tape.

Waist circumference was measured at an intermediate level between the last costal arch and the iliac crest. I followed the recommendation proposed by the Brazilian Diabetes Society Guideline – Update 2/2023: for women with abdominal waist circumference (WC) between 80-88cm (no risk) and men between 94-102cm (no risk), monitoring indicator of risk factors for coronary heart disease (SBD, 2023).

Hip circumference was measured at the level of maximal protrusion of the gluteal muscles. WHR was calculated as WC (cm) divided by hip circumference (cm) and WHR was calculated as WC (cm) divided by height (cm). Men with WHR < 0.90 (no risk), while women were classified in the same categories based on a WHR of < 0.80 (no risk) (MALACHIAS et al., 2016).

Resting blood pressure was measured by indirect auscultatory method, which used a stethoscope and a mercury sphygmomanometer (Tycos1, Model EC 048). The guidelines were followed according to the VI Brazilian Guidelines on Arterial Hypertension (SBC, 2010).

Table 1. Classification of Systemic Blood Pressure – Systolic Blood Pressure (SBP) and Diastolic Blood Pressure (DBP)

Classification	SBP mm Hg	DBP mm Hg
Normal	≤ 120	≤ 80
Prehypertensive	121 - 139	81 - 89
Stage 1 hypertensive	140 – 159	90 - 99
Stage 2 hypertensive	160 – 179	100 – 109
Stage 3 hypertensive	≥ 180	≥ 110

Note: When SBP and DBP are in different categories, the higher one should be used to classify BP. Isolated SAH is considered to be SBP ≥ 140 mm Hg and DBP < 90 mm Hg, and should be classified into stages 1, 2 and 3. Source: Arq Bras Cardiol 2016; 107 (suppl. 3) 1-83

The questions for eating habits and physical activity were adopted using an analog scale developed by the researcher himself. To verify the eating habits, the following question was elaborated: Their daily eating habits are adequate with the following requirements: three meals a day: breakfast, lunch and dinner at breakfast eating fruits and vegetables at lunch daily, inadequate when they do not meet the requirements. For physical activity, the following question was elaborated: Practice regular physical activity at least 30 minutes twice a week? Yes or no.

The data were analyzed using the *Statistical Package for the Social Sciences 20.0* and Stata 11.0, and the measures of central tendency and dispersion were performed for the quantitative variables. For the categorized qualitative variables, absolute and relative frequency distributions were performed. To compare the prevalence of physical activity with the independent variables, the Chi-square test of Independence was used. The prevalence ratio between the dependent variable was used, and the independent variables were conducted using logistic regression separately for each of the dependent variables, with a value of $p<0.20$. Initially, crude analyses were performed, followed by multivariate analyses that were conducted in order to control for potential confounding factors, both the crude analyses and those adjusted for sex and age due to the identification of interaction in the multiple model. Variables with *$p<0.05$ were considered in the final model.*

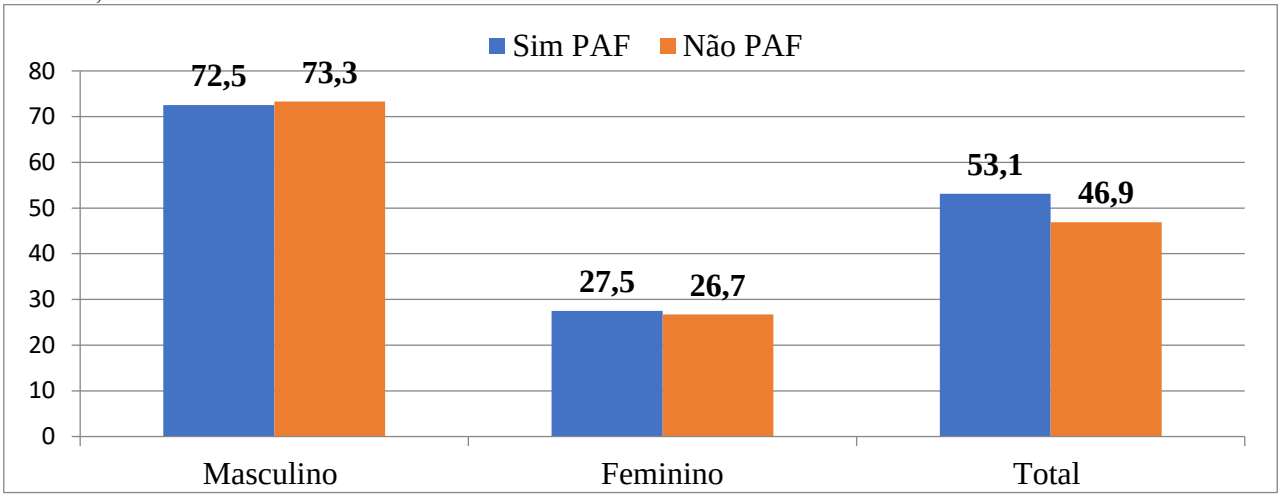
3 RESULTS

A total of 96 military police officers from the general assistance, traffic battalion, and internal affairs battalions of the state of Rondônia participated in the study.

Graph 1 shows the prevalence of regular physical activity by gender, males showed a higher prevalence (73.3%) self-reported non-regular PA practice, females showed a higher prevalence of regular PA 27.5%, and the total prevalence was 53.1%.

Table 1 shows the data on the quantitative variables by means, standard deviation and variation (minimum and maximum): age 40.76 ± 6.76 (27.00-60.00) years, systolic blood pressure (SBP) 129.53 ± 17.75 (90.00-200.00) mmHg, diastolic blood pressure 86.17 ±14.78 60,00-120,00) mmHg, body mass 86.10 ±15.20 (61.00-144.10) kg, body height 1.70 ±0.06 (1.57 – 1.89) m, body mass index (BMI) 29.64 ±4.72 (22.41-42.93) kg/m2, abdominal waist 93.41 ± 11.60 (69.00-125.00) cm, hip 106.85 ± 8.50 (92.00-140.00) cm and waist-to-hip ratio (WHR) 0.87 ± 0.08 (0.67-1.20) cm. In Table 2, the variables associated with non-PA practice presented by the residuals were: SBP being hypertensive (p=0.011), hypertensive DBP (p= <0.001), obese BMI (p= <0.001) and inadequate eating habits (p= <0.001). Table 3 shows the highest prevalences and factors associated with the final model were: hypertensive SBP (PR = 1.13; 95%CI: 1.13-1.60), obese BMI 78.9% (PR = 1.44; 95%CI: 1.30-1.60), waist risk 76.3% (PR = 1.67; 95%CI: 1.40-1.98) and inadequate eating habits 65.6% (PR = 1.66; 95%CI: 1.40-1.9).

Graph 1 - Prevalence (%) of regular physical activity by sex 96 military police officers from the general assistance battalions, traffic battalion and internal affairs battalions of the state of Rondônia. 2023



p<0.05 – Prevalence (%): chi-square test

Table 1. Characterization of health conditions by anthropometric measurements and systemic blood pressure of the 96 military police of the General Assistance, Traffic Battalion and Internal Affairs Battalions of the State of Rondônia. 2023

Variables	**Average**	**Standard deviation (variation)**
Age	40,76	6,76 (27,00-60,00)
STEP	129,53	17,75 (90,00-200,00)
PAD	86,17	14,78 (60,00-120,00)
Body mass	86,10	15,20 (61,00-144,10)
Body Height	1,70	0,06 (1,57 – 1,89)
BMI	29,64	4,72 (22,41-42,93)
Waist	93,41	11,60 (69,00-125,00)
Hip	106,85	8,50 (92,00-140,00)
WHR	0,87	0,08 (0,67-1,20)
	n	**%**
Sex		
Male	70	72,9
Female	26	27,1
Age/years		
27 / - 39	34	35,4
39 / - 51	51	53,1
≥ 51	11	11,5
STEP		
Normal	45	46,9
Prehypertensive	19	19,8
Hypertensive	32	33,3
PAD		
Normal	46	47,9
Prehypertensive	6	6,3
Hypertensive	44	45,8
BMI		
Normal Weight	18	18,8
Overweight	40	41,7
Obese	38	39,6
Waist		
Risk-free	58	60,4
At risk	38	39,6
WHR		
Risk-free	65	67,7
At risk	31	32,3
Eating habits		
Adequate	35	36,5
Inadequate	61	63,5

Table 2. Association of the non-practice of physical activity with the health conditions of the 96 military police officers of the General Assistance, Traffic Battalion and Internal Affairs battalions of the state of Rondônia. 2023

Variables		Physical Activity						
		Yes			No			
	n (%)	NOTE	ESP	RES	NOTE	ESP	RES	p-value
Gender								**0,931***
Male	70(72,9)	37	37,2	0,0	33	32,8	0,0	
Female	26(27,1)	14	13,8	0,1	12	12,2	-0,1	
Age/years								**0,671****
27 / - 39	34(35,4)	20	18,1	0,5	14	15,9	-0,5	
39 / - 51	51(53,1)	26	27,1	-0,2	25	23,9	0,2	
≥ 51	11(11,5)	5	5,8	-0,3	6	5,2	0,4	
STEP								**0,011****
Normal	45(46,9)	30	23,9	1,2	15	21,1	-1,3	
Prehypertensive	19(19,8)	9	10,1	-0,3	10	8,9	0,4	
Hypertensive	32(33,3)	12	17,0	-1,2	20	15,0	1,3	
PAD								**0,169****
Normal	46(47,9)	27	24,4	0,5	19	21,6	-0,6	
Prehypertensive	6(6,2)	1	3,2	-1,2	5	2,8	1,3	
Hypertensive	44(45,8)	23	23,4	-0,1	21	20,6	0,1	
BMI								**<0,001****
Normal Weight	18(18,8)	16	9,6	21,1	2	8,4	-2,2	
Overweight	40(41,7)	27	21,3	1,2	13	18,8	-1,3	
Obese	38(39,6)	8	20,2	-2,7	30	17,8	2,9	
Waist								**<0,001****
Risk-free	58(60,4)	42	30,8	2,0	16	27,2	-2,1	
At risk	38(39,6)	9	20,2	-2,5	29	17,8	2,7	
WHR								**0,280***
Risk-free	**65(67,7)**	**37**	**34,5**	**0,4**	**28**	**30,5**	**-0,4**	
At risk	31(32,3)	14	16,5	-0,6	17	14,5	0,6	
Eating habits								**<0,001****
Adequate	35(36,5)	30	18,6	2,6	5	16,4	-2,8	
Inadequate	61(63,5)	21	32,4	-2,0	40	28,6	2,1	

NOTE: Observed; RES: Waste; ESP: Expected; *Chi-square test and **Fisher's exact test ($p<0.05$); Waist-to-hip ratio (WHR); Prevalence (%) was calculated using the chi-square test.

Table 3. Prevalence (%) and prevalence ratio of factors associated with non-practice of physical activity with health conditions 96 military police officers from the general assistance, traffic battalion, and internal affairs battalions of the state of Rondônia. 2023

Variables	(%)	RPb	IC95%	P	RPa	IC95%	P
STEP							
Normal	33,3	1			1		
Prehypertensive	52,6	1,16	1,04-1,29	0,008	1,03	0,90-1,19	0,699
Hypertensive	62,5	1,41	1,23-1,61	<0,001	1,34	1,13-1,60	0,001
BMI							
Normal Weight	11,1	1			1		
Overweight	32,5	1,04	0,90-1,19	0,635	1,01	0,85-1,19	0,890
Obese	78,9	1,43	1,29-1,58	<0,001	1,44	1,30-1,60	<0,001
Waist							
Risk-free	27,6	1			1		
At risk	76,3	1,63	1,36-1,94	<0,001	1,67	1,40-1,98	<0,001
Eating habits							
Adequate	14,3	1			1		
Inadequate	65,6	1,67	1,41-1,97	<0,001	1,66	1,40-1,97	<0,001

PR: prevalence ratio; *Adjusted for age and gender

4 DISCUSSION

The military police officers of the general assistance battalions, traffic battalion and internal affairs of the state of Rondônia showed a high prevalence of non-regular practice of physical activity, thus revealing a serious health problem to the interviewees and the Military Police. After adjustment in the final model, the variables associated with non-regular PA practice were: the group of hypertensive, obese, high waist with risk of cardiovascular diseases and aultorreport having an inadequate diet.

The prevalence of SBP revealed in this study was high and worrisome in military police officers: 62.5%, with a risk of hypertension PR = 1.34 (95%CI 1.13-1.60). The World Health Organization estimates that about 600 million people have Arterial Hypertension (AH), with a global growth of 60% in cases by 2025, in addition to about 7.1 million deaths annually (CAMPBELL et al., 2022), the consequence is to lead to an increase in costs in the health system, with an important socioeconomic impact, with an increased incidence of risk for Cardiovascular Disease (CVD), often being responsible for work incapacity and leading to early retirement, by increasing the chance of coronary artery disease, heart failure, cerebrovascular disease, chronic renal failure, and death (PAN AMERICAN HEALTH ORGANIZATION, 2021, , AL-MAKKI ET AL., 2022, WHO, 2018).

The Global Hearts Initiative and the Hearts Program in the Americas: An Approach to Reducing the Risk of CVD through the Management of Arterial Hypertension, with the strengthening of CVD prevention actions, such as greater control of smoking, reduction of salt in the diet, increase of physical activity, elimination of the consumption of industrially produced trans fats and management of cardiovascular risks (WHO, 2016). Based on these prevention recommendations, physical activity is indicated as an effective means in the prevention of arterial hypertension, so it is of paramount importance to disseminate information and guidance to workers in general about the importance and benefits of adherence to habitual physical activity (WHO, 2020).

The World Health Organization's recommendations on physical activity and sedentary behavior include all populations, regardless of gender, cultural background, or socioeconomic status, and are relevant to people at all skill levels. Adults are recommended to engage in at least 150-300 minutes of moderate-intensity aerobic physical activity, or 75-150 minutes of vigorous-intensity physical activity, for substantial health benefits (WHO, 2020). The WHO also recommends that adults limit the time of sedentary lifestyle, replacing it with any intensity of PA, even if it is mild. However, it is estimated that, in 2016, 27.5% of adults and 81% of adolescents did not meet WHO recommendations (WHO, 2020).

Regular PA has a potential effect on reducing the risk of all-cause mortality, being associated with a reduced risk of developing several comorbidities, including: type II diabetes mellitus, cardiovascular diseases, depression, and several types of cancer (AERTS et al., 2021). Thus, its

encouragement is essential for the general population as a form of treatment, disease prevention and health promotion.

The prevalence of obesity in military police officers was 78.9%, with a risk of obesity PR = 1.44 (95%CI 1.30-1.60). Obesity is a public health problem that has expanded worldwide, with about 7.4 million people (33.7%) aged 18 to 24 being overweight in 2019. When looking at the age group between 40 and 59 years, this prevalence rises to 70.3%, which represents 39.5 million people (SWINBURN et al., 2019)

It has been repeatedly shown that physical activity can have acute and chronic effects on risk factors for numerous chronic diseases. For example, insulin decreases after acute periods of physical activity, and this reduction is sustained with repeated episodes of activity. Moderate to intense physical activity has also been shown to decrease the onset of chronic diseases such as heart disease, diabetes, and cancer [1].

Despite the known benefits of physical activity, adherence is far below expectations, national surveys have shown that the prevalence of individuals engaging in adequate levels of physical activity to promote health has remained relatively stable at approximately 25% to 30% of adults, moreover, despite the importance of physical activity in maximizing body mass control and reduction (JOHNSON et al., 2021), long-term adherence rates in overweight and obese adults to prevalence rates are still low, driven by the wave of incidence rates caused by various intrinsic and extrinsic factors.

The inclusion of physical activity in behavioral weight management programs can significantly increase fat reduction in the medium and long term. In addition, physical activity may have independent effects on risk factors that impact morbidity and mortality rates in overweight individuals (overweight and obesity). Therefore, it is important for overweight individuals to practice at least 150 minutes per week of moderate-intensity physical activity as a protective factor and promote health (WHO, 2020).

Systematic review studies that have shown intervention programs with physical activity have demonstrated effective effects on reducing fat mass and increasing lean mass (LOPEZ et al., 2022, BELLICHA et al., 2021).

The prevalence of CHD in military police officers was 76.3% high with a PR = 1.67 risk (95%CI 1.40-1.98), this measure is positively associated with the risk of cardiovascular diseases (HAITO et al., 2020, STREB et al., 2020). A study proposed by Carvalho et al. (2015) showed that physical activity is a protective factor against increased WC, obesity and cardiovascular diseases. Waist circumference allows you to assess the distribution of body fat. Altered WC reports fat in the abdominal region, presenting a risk of metabolic changes in the diagnosis of altered hypertension and high CVR, which, in turn, represents an increase of around two to six times in having CVR associated with

advancing age (BARROSO et al., 2019). Currently, this measure has received important attention in the assessment of cardiovascular risk because it is a strong predictor of the amount of visceral fat, that is, the main responsible for the appearance of metabolic changes and cardiovascular diseases (WANG et al., 2015).

Military police officers (PMs) are a different population group from the general population, due to the fact that they constantly deal with violence and crime, which triggers severe stress (COSTA *et al.*, 2007) and various mental health disorders (MINAYO; ASSISI; OLIVEIRA, 2011). In addition, they are exposed to cardiovascular risk factors common to the general population, such as physical inactivity (BARBOSA; SILVA, 2013; FERREIRA; BONFIM; AUGUSTO, 2011), dyslipidemias, (BARBOSA; SILVA, 2013; CALAMITA *et al.*, 2010), smoking (BARBOSA; SILVA, 2013; FERREIRA; BONFIM; AUGUSTO, 2011; SOUZA *et al.*, 2013), alcoholism (BARBOSA; SILVA, 2013; FERREIRA; BONFIM; AUGUSTO, 2011; SOUZA *et al.*, 2013), overweight (BARBOSA; SILVA, 2013; CALAMITA *ET AL.*, 2010; DONADUSSI *et al.*, 2009; SANTANA *et al.*, 2012) and, particularly, abdominal obesity (BARBOSA; SILVA, 2013; DONADUSSI *et al.*, 2009; BRAGA FILHO; D'OLIVEIRA JR, 2013).

In fact, records of abdominal obesity among Brazilian military police officers indicate that this seems to be a more relevant problem among military police officers in southeastern Brazil (32.1%) (SANTANA *et al.*, 2012) and Bahia (31.76%) (BRAGA FILHO; D'OLIVEIRA JR, 2013), and less worrisome among the Military Police of Cascavel-PR (12.0%) (DONADUSSI *et al.*, 2009) and Rio Grande do Sul (18.0%) (BARBOSA; SILVA, 2013), thanks to the low prevalence of this risk factor, which, despite this, is beginning to be of interest to researchers due to its association with cardiovascular risk.

Military police officers self-reported inadequate eating habits, the prevalence was 65.6% PR = 1.66 (95%CI 1.40-1.97). The study Donadussi et al. (2009) observed a high intake of calorie-dense, carbohydrate and lipid foods above the recommended level, considered a risk factor for abdominal adiposity, obesity and risk of cardiovascular diseases. The author suggests that actions involving nutritional education and regular physical activity are awareness-raising counseling for this target audience to improve their health and prevent the onset of chronic non-communicable diseases, improving the quality of life of military police officers. Intervention studies (TEIXEIRA et al., 2013, OOSTERVEEN et al., 2017) with physical activity programs and eating habits have been shown to be effective in changing the lifestyle behavior of individuals regarding the healthy aspect, with adherence to the practice of physical activity and improvement in their food menu with the inclusion of fruits and vegetables, and reduction of saturated fats.

There are limitations to the study that should be considered. This is a cross-sectional study that evaluates only the association between variables, without the possibility of defining a cause-and-effect

relationship. The study included a group of military police officers who work in the battalions of the general assistance, traffic battalion and internal affairs of the state of Rondônia. In addition, it is also necessary to highlight the fact that the sampling was by convenience, which can cause a certain restriction of the inferences obtained by the results to make a survey of external validity for the other PMs in the state of Rondônia. Another item was questions in relation to the regular practice of physical activity, diet that used an analog scale with the construction of the response categories by the researcher himself, so the interviewees self-reported, considered very subjective answers.

5 CONCLUSION

The highlighted findings of the present study showed a high prevalence of subjects who self-reported not practicing physical activity regularly 46.9%, men 73.3% and women 26.7%, the risk factors were hypertension, obese, high waist circumference and inadequate diet.

The practice of regular physical activity at least twice a week with control of PA components frequency, duration and intensity is an effective means to assist in the control and maintenance of morphological and functional parameters, and guidance for the control and changes of healthier eating habits, raising awareness of the importance for health of the inclusion of fruits and vegetables in their food menus. In addition, it is necessary to invest in the implementation of physical activity programs by qualified professionals, to improve the quality of life of these military police officers.

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