



RESEARCH ARTICLE

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PHYSICAL ACTIVITY AND DEPRESSION PRACTICE IN MILITARY POLICE OFFICERS

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ABSTRACT

The military police officers during their work assignments has to be in full disposition and vigilant to all situations that may be a risk to everyone. Due to social pressures, psychological, work demands, and high stress levels, is becoming more common the diagnosis of depression in military police officers. The present study aims to evaluate the practice of physical activities and the diagnosis of depression in military police officers in Vitória da Conquista. This is an epidemiological, cross-sectional and quantitative research. The present study was made with the volunteer participation of 165 police officers of both genders, all were informed about the research's risks and benefits and accepted to participate answering to the questionnaires that were selected to the diagnosis of depression and practice of physical activity. In analysis of the 165 military police officers was verified that 87,27% were males. 64,85% were classified as active according the IPAQ and the major part, 75,15%, were not diagnosed with depression. Most of them were between 25 to 34 years old (43%) and between 35 and 44 years old (44,24%). The index of depressive police officers was low, however, is perceptible that a high number of professionals needs psychological help, even those who are active, demonstrating that a stressful job is a major factor to the development of mental disorders in police officers.

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INTRODUCTION

Depression is becoming a public health's issue all over the world, which has a great impact in the health of millions of people. Requiring an important attention from global health institutions to mitigate their morbidity and mortality (Hosseini, 2018). Currently, the daily stress of work activities and every day life, mostly in some professions such as police officers, has required much of cognitive and psychological ability (Buehler et al., 2018). Police officers in their work assignments must be in full provision and alert in order to be aware to all situations that complete risk to everyone (Brooks, 2018). Due to social and psychological pressures, work demands and high stress levels,

is very common the diagnosis of depression in police officers (Medeiros and Rubinstein, 2015). What also need to be take in consideration is that this professional is a human being and suffers several problems, such as professional and personal problems, and also has many attributions and responsibilities; can be better analyzed as a subject with their affections, emotions and subjectivities (Arensman et al., 2016). Those in several situations the personal problems are not separated from the professionals (Ribeiro et al., 2018). The police officers' conditions of health involve pleasure and suffer that leads to achievement or attrition; lived and noticed risks, that structure the profession; and physical injuries, arising from the life and work conditions, associated with biological conditions

(Garbarino *et al.*, 2019). Living with violence, the constant risk of death and the excessive charges of work are factors that causes stress and compromise the police officers' quality of life (Chu *et al.*, 2016). Thus, it is needed to move forward in the comprehension of the psychological, social and physical aspects, capable of promote a better quality of life to the Brazilians police officers. Interventions that seek to promote the physical and mental health of these professionals are needed, stimulating individual/personal and institutional changes, concerning the organization of police's work (Bryan *et al.*, 2015). In view of the above the present study has as an objective evaluate the practice of physical activities and the diagnosis of depression in military police officer in Vitória da Conquista.

METHODOLOGY

This is a cross-sectional, quantitative and epidemiological research. The survey will be conducted in the city of Vitória da Conquista – BA, Brazil (Latitude 14 ° 51 '58', Longitude -40 ° 50 '22) which according to the IBGE census (2010) has about 320129 habitants. The study was conducted with the city's military police officers, where, according to the human resources sector of the Police Command, the force has 432 police officers. The present study was conducted with the voluntary participation of 165 police officers of both genders, all of them were informed about the risk and benefits of the research and agreed to participate by answering the questionnaires that were selected for the diagnosis of depression and for physical activity. For the verification of the variables was utilized the questionnaire BDI (Beck Depression Inventory), which is used to measure the intensity of the depression, one of the first dimensional recourses. Was originally created by Beck *et al.* (1961) and reviewed by Beck *et al.* (1979/1982). Initially was developed as a symptomatic scale of depression, to use in psychiatrist patients, and many studies about their psychometric properties were made in the fallow years. This later became widely used in both clinical and research areas, proving to be a useful tool for the general population as well, according to the manual of Beck. It is a self-report scale of 21 items, which with four alternatives, implying increasing degrees of severity of depression, with scores from 0 to 3. The items were selected based in observations and reports of most frequent symptoms e attitudes in psychiatric patients, with depressive disorders, and were not chosen to reflect any theory of depression in particular (David *et al.*, 2019).

The International Physical Activity Questionnaire (IPAQ) was developed to facilitate the monitoring of physical activities based on a global standard, widely used in epidemiological research because it is easy to apply and low cost, validated in over 12 countries, including Brazil, and with widely accepted reliability. There are two forms of the questionnaire, one with 31 questions (IPAQ) and one with 9 questions (IPAQ-Short Form). The reduced version is indicated to research of the monitoring of self-reported physical activity, including transport, recreation, walking, cycling, and low, medium and high intensity physical activity, being these performed in the last week, because it is easier to answer by the participants (David *et al.*, 2019). The participants were instructed to answer the questionnaire based in the self-report of physical activities developed during the week and the answers given in days and hours. With the obtained results, the subjects were classified in "very active", "active", "moderately active" and "sedentary",

as proposed, being the first two categories were grouped and named as "actives" and "not actives" (David *et al.*, 2019). The data was tabulated and processed in the program Excel version 2016 and later transferred to a statistical program. The statistical analysis was made considering a significant level of $p < 0,05$. In which was used the Minitab version 19 to statistical analysis of the data. A descriptive data analysis was made, being represented in absolute and relative frequency. Na association test was made too – Pearson's chi square test – to the dependent and independent variable. The Project was approved by the Ethics and Research Committee (CEP) of the Esaú Matos Hospital with the protocol number 3.421.198, and the participants were enlightened about the methods used and signed the Term of Free and Enlightened Consent (TCLE) as the Resolution.

RESULTS AND DISCUSSION

In analysis of the 165 police officers was verified that 87,27% were males 64,85% were classified as actives according to the IPAQ and the great major, 75,15%, were not diagnosed with depression. The most part of the sample were between 25 and 34 years old (43%) and from 35 to 44 years old (44,24%), more information can be found in table 1. Corroborating the findings of Silva *et al.* (2012) the major part of the police officers in active are between 25 and 44 years old and mostly males (Silva *et al.*, 2012).

Table 1. Description of the variables

		N	%
Age	19 a 24 years old	7	4,24
	25 a 34 years old	71	43,03
	35 a 44 years old	73	44,24
	45 a 54 years old	14	8,48
Gender	Feminine	21	12,73
	Masculine	144	87,27
IPAQ	Active	107	64,85
	Not Active	58	35,15
Depression	Light Depression	26	15,76
	Moderate Depression	15	9,09
	Without Depression	124	75,15

Fonte: Own research, 2019; IPAQ - International Physical Activity Questionnaire

Table 2. Test Chi Square to Association

	Light Depression	Moderate Depression	Without Depression	p value
Active	21	12	74	0,053
	16,861	9,727	80,412	
Not Active	5	3	50	0,574
	9,139	5,273	43,588	
Feminine	4	3	14	0,574
	3,31	1,91	15,78	
Masculine	22	12	110	0,574
	22,69	13,09	108,22	

Fonte: Own research, 2019.

The police officers are exposed to high stress levels related to work, this scenario of irregular and often unhealthy work conditions (shift work, long working hours and unfavorable lifestyles such as physical inactivity) can be related to the increasing number of cardiovascular disease and other morbidities (Violanti *et al.*, 2013). Several long hours of work and exposure to many extrinsic and intrinsic stressors are associated with hypertension, dyslipidemia, diabetes, mental

disorders and weight alterations in police officers (Can; Hendy, 2014). In particular, low levels of physical activities and high levels of stress in work may predispose the police officers to obesity, bad lifestyle and, consequently, more risk to psychological disorders (Charles *et al.*, 2008; Vancini *et al.*, 2018). The work of the Military Police Officer requires a mental and physical health, always maintaining a good health. The World Health Organization (WHO) define health as “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (Hartley *et al.*, 2011). Their day-to-day activities increase their stress and may influence on occurrences (Hartley *et al.*, 2012). The Military Police Officer carries out a risk activity and their decisions and actions go against the most protected assets of society that is “Life and Freedom”, having to make decisions and act in a few seconds always demonstrating impartiality (Souza, 2018). But this is not the only thing that can increase the stress levels, low remuneration, work schedule, the search for extra hours e family problems that affects their day-to-day life (Fekedulegn *et al.*, 2018). The lack of physical activity is directly linked to cardiovascular disease and psychological problems that is because most police who do not have an active life have some kind of disease, or Have some limitation or unwillingness in their daily activity. (Baughman *et al.*, 2016). But these diseases are also related to poor diet, alcohol use and cigarette use (Ferraz *et al.*, 2018). Police work often exposes police officers to situations where they require them to be in perfect physical and mental condition, as exposure to stress and interpersonal relationships with society raises their adrenaline levels and contributes to potential psychological problems (Arble *et al.*, 2018). Another factor in the work of military police refers to the charging of both the public power, because it is a public agent belonging to Public Security; as the charging of society that does not accept mistakes by the police and the media that often distort or manipulate information that harms the military policeman who carries out his work under surveillance from all sides (Mccanlies *et al.*, 2018; Tuttle *et al.*, 2019).

Considerações Finais

The military police officers needs to be very psychologically well in order to perform their job duties optimally. Since the emotional demands are so great, they put their lives at risk in order to save the lives of others. Even so, it is often not welcomed, as its effort to ensure the safety of the population is unrecognized and the work becomes arduous under social and corporate judgment. The identification of mental disorders such as depression in police officers is extremely important because, based on an analysis based on real data, one can think of actions to improve the quality of life of police officers, especially those related to psychological issues. Psychic well-being is fundamental for a good work, respecting all the norms and guidelines proposed by the legislation. The rate of depressive police officers was low; however, it is clear that there are a high number of professionals who are in need of psychological help, even those who have been classified as active, suggesting that stressful work is a very important factor for the emergence of mental disorders in police officers.

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