

# Intervention proposal for the practice of physical activity in police officers

## Proposta de intervenção para a prática de atividade física em policiais militares

### Propuesta de intervención para la práctica de actividad física en agentes policiales

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# REVISA

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#### RESUMO

**Objetivo:** Apresentar um protocolo de intervenção para o estímulo da atividade física em policiais militares. **Método:** Relato de experiência profissional. **Resultados:** Construção de um protocolo de intervenção adotando-se a Teoria do Comportamento Planejado e a oferta de informações sobre a atividade física por meio de telemensagens móveis. Trata-se de um protocolo a ser desenvolvido em um período de dois meses, em três etapas: i) diagnóstico situacional: levantamento das barreiras elencadas pelos policiais militares para a atividade física; ii) planejamento da ação: envio semanal de telemensagens móveis sobre a atividade física no trabalho, lazer e nas atividades diárias considerando as barreiras identificadas e iii) monitoramento dos participantes: efetivação de ligação mensal a fim de verificar a execução do planejamento elaborado para checar se foi feito, se houve dificuldades e quais foram as facilidades. **Conclusão:** Apresenta uma alternativa factível capaz de gerar levantamentos de dados quanto ao nível de atividade física em policiais militares, bem como contribuir na sensibilização para manutenção desse comportamento de saúde com vistas ao controle da doença e a qualidade de vida.

**Descritores:** Protocolos Clínicos; Exercício Físico; Polícia; Enfermagem.

#### ABSTRACT

**Objective:** To present an intervention protocol to encourage physical activity in military police officers. **Method:** Report of professional experience. **Results:** Construction of an intervention protocol adopting the Theory of Planned Behavior and offering information about physical activity through mobile telemessaging. This is a protocol to be developed over a period of two months, in three stages: i) situational diagnosis: survey of the barriers listed by military police officers for physical activity; ii) action planning: sending weekly mobile telemessages about physical activity at work, leisure and in daily activities considering the identified barriers and iii) monitoring of participants: carrying out a monthly call in order to verify the execution of the plan prepared to verify whether was done, were there difficulties and what were the facilities. **Conclusion:** It presents a feasible alternative capable of generating data collections on the level of physical activity in military police officers, as well as contributing to raising awareness for maintaining this health behavior with a view to controlling the disease and improving quality of life.

**Descriptors:** Clinical Protocols; Physical exercise; Police; Nursing.

#### RESUMEN

**Objetivo:** describir un protocolo de intervención para fomentar la actividad física en policías militares. **Metodología:** Informe de experiencia profesional. **Resultados:** Construcción de un protocolo de intervención adoptando la Teoría de la Conducta Planificada y ofreciendo información sobre la actividad física a través de telemensaje móvil. Se trata de un protocolo que se desarrollará en un período de dos meses, en tres etapas: i) diagnóstico situacional: levantamiento de las barreras enumeradas por los policías militares para la actividad física; ii) planificación de acciones: envío de telemensajes móviles semanales sobre actividad física en el trabajo, ocio y actividades diarias considerando las barreras identificadas y iii) seguimiento de los participantes: realización de una llamada mensual con el fin de verificar la ejecución del plan elaborado para verificar si se cumplió, hubo dificultades y cuáles fueron las instalaciones. **Conclusión:** Presenta una alternativa factible capaz de generar recolección de datos sobre el nivel de actividad física en policías militares, además de contribuir a la sensibilización para mantener este comportamiento de salud con miras a controlar la enfermedad y mejorar la calidad de vida.

**Descritores:** Protocolos Clínicos; Ejercicio físico; Policía; Enfermería.

ORIGINAL

## Introduction

Physical inactivity is one of the biggest public health problems globally. It is the fourth most prevalent cardiovascular risk factor in the population and responsible for the second leading cause of death in the world, causing an average of 3.2 million deaths each year.<sup>(1)</sup> In addition, it is a lifestyle trend that contributes to the maintenance of cardiovascular diseases as the main cause of mortality in Brazil.<sup>(2)</sup>

Insufficiently active adults have an increased risk of all-cause mortality of around 20 to 30%.<sup>(3)</sup> In Brazil, only 39% of adults practice moderate physical activity on a regular basis, per week, in their free time. In Salvador-Bahia, 42.9% of adults do not reach the recommended levels of physical activity<sup>(4)</sup>

The adoption of better lifestyle habits, such as the practice of regular physical activity, is currently considered in world discussions as an effective method for the prevention of various diseases.<sup>(5,6)</sup> Among them, physical activity contributes to the prevention and treatment of Chronic Non-Communicable Diseases (NCDs), promoting health, quality of life, and well-being.<sup>(3)</sup> Regular physical activity, even at lower intensity, can contribute to the prevention and control of NCDs.<sup>(7)</sup>

Among the professions that exist in the world, that of the military police officer is at the top of the most susceptible to the development of NCDs. (8) Among the contributing factors are schedules with long working hours, high responsibility to defend society and maintain public order, tensions caused by hierarchical conflicts, high-risk situations, and high sitting time.<sup>(8,9)</sup>

In view of the above, it is essential to build, implement and evaluate interventions that stimulate physical activity, which developed based on public health policies, can have effective effects on the control of NCDs.<sup>(3)</sup> From this perspective, information and communication technologies (ICTs), such as mobile telephony through cell phones and smartphones, have been widely used as tools to facilitate the dissemination of information, health guidance on various topics.<sup>(10)</sup> However, it is important that they be based on theoretical models proposed to understand health behaviors.

Considering the aforementioned context, the Theory of Planned Behavior (TCP) is a motivational model used to understand different human behaviors, including those related to health. This theory considers intention as the main determinant for the implementation of the objectified human behavior.<sup>(11)</sup> However, there are gaps in the path taken between the intention and the realization of the desired behavior, because even when people present the positive intention for implementation, they may not be able to implement the desired behavior.<sup>(12,13)</sup>

In 1999, Gollwitzer proposed an intervention model that assists in the positive "activation of intention" to carry out the desired behavior in an effective achieved behavior. Based on this model, activating the intention consists of the action of transforming motivation into behavior through self-regulatory skills such as: "Action Planning", in which the person must identify where, when and how they will perform the intended behavior, being able to recognize existing relationships between future situations that may hinder or prevent the implementation of the behavior; and the "Obstacle Coping Planning", which is a cognitive planning that foresees possible risk situations

for not carrying out the intended behavior, as well as a plan for coping and overcoming these risk situations, if they occur.<sup>(14)</sup>

In view of the above, the present study is a report of professional experience that aims to present an intervention protocol aimed at stimulating the practice of physical activity in military police officers.

## **Method**

### **Type of study**

This is a report of the professional experience of nurse professors and a graduate student in Nursing and Health at a public university. This report describes the construction of an Intervention Protocol for the Physical Activity of Military Police Officers, based on CPET and the sharing of information about the practice of physical activity through mobile telemessages.

### **Construction and steps for the application of the Intervention Protocol for the Physical Activity of Military Police Officers**

It is a protocol to be developed over a period of two months, in three stages:

1) Situational diagnosis: consists of the survey of the barriers listed by the military police for physical activity;

2) Action planning and coping with obstacles: includes the weekly sending of mobile messages, in text format, through the WhatsApp application on the practice of physical activity in the context of work, leisure and daily activities, focusing on the barriers identified individually. The messages will be created based on what the scientific literature says about the theme addressed and constructed according to the difficulty listed by the participant regarding the practice of physical activity;

3) Monitoring of the participants, by means of a monthly call, in order to verify the execution of the elaborated planning, to check if it was done, if there were difficulties and what were the facilities. The use of this intention activation strategy will also be based on previous studies that have reported positive outcomes regarding physical activity in people with type 2 diabetes mellitus<sup>(11)</sup>, reduction of salt intake in people with hypertension<sup>(17)</sup> and walking among people with coronary heart disease.<sup>(18)</sup>

### **Ethical aspects**

The protocol was reviewed and approved by the Research Ethics Committee of a School of Nursing, on December 19, 2020, with opinion number 4,476,940 and complied with national and international standards for research with human beings.

The research is linked to the Matriz project entitled "Level of physical activity in military police officers: predictors and nursing intervention protocol".

## Results

This section presents the three steps to be developed in the implementation of the Intervention Protocol for the Physical Activity of Military Police Officers.

### First Stage - Situational Diagnosis

At this stage, the barriers listed by the military police for physical activity should be surveyed.

Participants will be sent three identical Google forms for the planning of: 1. Physical activity (PA) in the workplace, 2. AF at leisure time and 3. PA in daily activities.

These forms were adopted according to previous studies<sup>(11,15,16)</sup> that used them<sup>(16)</sup> and the strategy of activating intention to work with behavior change. The three forms should follow suit:

*We would like to help you plan and carry out physical activity. "Please think about your physical activity at work, at leisure, and in your daily activities over the next two months. When, where, how and with whom do you plan to carry it out? What are the barrier(s) you face to physical activity and how do you believe you can overcome it? Let's start with recording your plans in the table I'm going to show you. The more precise, concrete, and personal your plan is, the easier it will be to carry it out."<sup>(16)</sup>*

**Chart 1-** Planning physical activity at work. Salvador, Bahia, 2022.

MY GOAL: TO ENGAGE IN PHYSICAL ACTIVITY AT WORK						
Professional Category: Military Police						
Action Planning					Obstacle coping planning	
	When	Where	How	With whom	Barrier	Strategy
Plano 1						
Plano 2						
Plano 3						

Based on the three forms answered by the participants, the main barriers of military police officers to physical activity should be raised. Then, a bank of guidelines on PA should be built in word, according to the barriers listed by the participants.

### Second Stage - Planning the action and coping with obstacles

At this stage, during two months, 24 messages should be sent focusing on the difficulty pointed out by the military police officers, considering the need to plan the action and face obstacles, based on the study by Silva et al (2015). To this end, mobile messages should be sent weekly about physical activity in the context of work, leisure and daily activities, focusing on the individually identified barrier.

It is recommended that text messages be no more than 160 characters long, including spaces, and be sent three times a week. In addition, it is necessary to establish with each participant which are the most comfortable days and times to receive the messages, through a link generated in google forms, with the viable alternatives for the researcher, and shared with them to choose the best option.

Messages should be crafted in accordance with the intent activation strategy. It is necessary to carry out the planning of actions to carry out physical activity and the planning to cope with obstacles, which will consist of predicting the risks and barriers that may make it impossible to carry out the planned action. It is recommended that the mobile telemessaging program and all stages of the intention activation strategy be carried out with the support of a physical education professional.

### **Third stage - Monitoring of the participants to verify the execution of the prepared planning**

In addition to the telemessaging program, all participants should receive a call at the end of each month, which will be made only by the project's principal investigator and will aim to check if everyone is receiving text messages and to find out whether or not the participant would like to continue participating in the intervention and its justifications. The calls should be guided by a script elaborated on each barrier faced for the physical activity listed by the participants and will have an estimated maximum duration of ten minutes.

## **Discussion**

The protocol presented in this professional experience report comes at an opportune moment given that, regarding the health of military police officers, standardized strategies in the field of physical activity for the prevention, detection and control of NCDs have been little published in the national and international literature.

By searching the scientific literature from the Cochrane Central Register of Controlled Trials (CENTRAL), PubMed/ National Library of Medicine, Virtual Health Library/ BIREME and Education Resources Information Center (ERIC) databases, using the DeCS/MeSH descriptors: Police/ Police OR Police force; Atividade Física/ Physical Activity; Cardiovascular Disease; Comportamento Sedentário/ Sedentary Behavior; Health Education, in any language, using the Boolean operators AND and OR, in the last ten years, no specific studies were found on the theme addressed, noting a lack of research in this direction.

Considering that this is a protocol aimed at military police officers, it is important to note that this professional category has a high rate of deficiency in physical activity, which negatively influences the prevention and control of SAH among them.<sup>(17)</sup>

In a study conducted in England<sup>(19)</sup>, it was found that a regular physical activity program, provided and supervised by the police departments, was essential for the police officers to be able to perform their duties in the corporation. Physical activity is capable of having a positive impact on work performance, as well as reducing risk factors, such as being overweight, for the development of chronic diseases.

The development of a protocol that is easy to apply by health professionals and with the use of mobile technology may be a feasible strategy to reach the target population of this professional experience report and other populations affected by NCDs. The World Health Organization (WHO) establishes electronic health (eHealth) with the use of ICTs as a safe, effective and low-cost means to contribute to health actions. In addition, it specifies mHealth as the use of mobile

devices such as mobile phones to support public health practices. With the use of cell phones and applications, it is possible to generate health data surveys as well as forward messages with educational content.<sup>(20)</sup>

It is believed that the intervention model of "Intention Activation" linked to the use of the mobile telemessaging program may be useful to implement healthy behaviors in people with NCDs, such as physical activity at recommended levels.<sup>(11)</sup>

Although the authors have not yet evaluated the impact of the implementation of this protocol, it is noted that it is part of a main research project whose main objective is to evaluate the effectiveness of a mobile telemessaging program on the level of physical activity of military police officers. Through this study, it will be possible to compare anthropometric patterns and mean blood pressure before and after the intervention, which will incorporate the mobile telemessaging program and the intention activation strategy. In addition, this protocol can guide the action of several health professionals in the elaboration of strategies guided by the theoretical and methodological bases described in this experience report.

## Conclusion

This report of professional experience can favor the sharing of standardized information on the encouragement of physical activity that can be applied with military police officers and other populations. It is suggested that this intervention model can favor the comprehensiveness of care and promote an improvement in the quality of life and work performed by military police officers.

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