



REVIEW

Considerations about the importance of physical exercise in people's health and well-being

Consideraciones sobre la importancia del ejercicio físico en la salud y bienestar de las personas

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ABSTRACT

Introduction: physical exercise is any physical activity that improves and maintains a person's physical fitness, health and well-being. It is carried out for various reasons, such as muscle strengthening, improving the cardiovascular system, developing athletic skills, fat loss or maintenance, emotional well-being as well as recreational activity.

Objective: characterize the effect of physical exercise on people's health and well-being.

Method: a review of the literature available in databases such as SciELO, Scopus and ClinicalKey was carried out, of which a total of 15 related articles were consulted, empirical methods such as logical history and analysis and synthesis were used.

Results: physical activity is considered the factor that intervenes in the state of people's health. The constant practice of physical exercise improves and strengthens the immune system, helping to preserve the integrity of the cells in the body. During the first years of life it can make a difference in terms of the good condition of the bone system, cardiovascular resistance, and lower blood pressure, overweight and obesity. The practice of physical activity is also seen to be related to reducing symptoms of fatigue, stress, depression and increasing self-esteem and improving mood.

Conclusions: physical exercise is presented as an essential tool to achieve a healthier, happier and fuller life. Regardless of age or physical condition, exercise can be adapted to individual needs, becoming an investment in your long-term health and well-being.

Keywords: Physical Activity; Health; Physical Exercise; Quality of Life.

RESUMEN

Introducción: el ejercicio físico es cualquier actividad física que mejora y mantiene la aptitud física, la salud y el bienestar de la persona. Se lleva a cabo por varias razones, como el fortalecimiento muscular, mejorar el sistema cardiovascular, desarrollar habilidades atléticas, pérdida de grasa o mantenimiento, bienestar emocional así como actividad recreativa.

Objetivo: caracterizar el efecto del ejercicio físico en la salud y bienestar de las personas.

Método: se realizó una revisión de la bibliografía disponible en bases de datos como SciELO, Scopus y ClinicalKey de las cuales se consultaron un total de 15 artículos relacionados, se utilizaron métodos empíricos como el histórico lógico y de análisis y síntesis.

Resultados: la actividad física se considera como el factor que interviene en el estado de la salud de las personas. La práctica constante de ejercicio físico mejora y fortalece el sistema inmune, ayudando a preservar la integridad de las células en el organismo, durante los primeros años de vida puede marcar una diferencia en cuanto al buen estado del sistema óseo, resistencia cardiovascular, menor tensión arterial,

sobrepeso y obesidad. La práctica de actividad física también se la ve relacionada con la disminución de síntomas de cansancio, estrés, depresión y aumenta la autoestima y mejorar el estado de ánimo.

Conclusiones: el ejercicio físico se presenta como una herramienta esencial para lograr una vida más saludable, feliz y plena. Independientemente de la edad o la condición física el ejercicio se puede adaptar a las necesidades individuales, convirtiéndose en una inversión en tu salud y bienestar a largo plazo.

Palabras clave: Actividad Física; Salud; Ejercicio Físico; Calidad de Vida.

INTRODUCTION

The World Health Organization (WHO) defines *physical activity* as “any bodily movement produced by skeletal muscles that requires energy expenditure,” not to be confused with exercise because the latter is a variety of planned, structured, repetitive physical activity performed with an objective related to the improvement or maintenance of one or more fitness components that may consist of recreational activities, commuting activities such as walking or cycling, occupational activities, household chores, games, sports, or programmed exercises.⁽¹⁾

Lack of physical activity is termed sedentary and defined as any waking behavior characterized by energy expenditure $\leq 1,5$ metabolic equivalents, such as sitting, lying, or lying down. The prevalence of these habits is related to abnormal glucose metabolism and cardiometabolic morbidity, as well as overall mortality.⁽²⁾

Factors such as hypertension, high cholesterol, inadequate fruit and vegetable intake, overweight and obesity, physical inactivity, and tobacco use are major risk factors responsible for approximately 80 % of deaths from cardiovascular disease and stroke. Also, it is estimated that “physical inactivity is the main cause of 21-25 % of breast and colon cancers, 27 % of diabetes, and 30 % of ischemic heart disease.”⁽¹⁾

In the municipality of Manizales in Colombia, a study was conducted on the levels of sedentary lifestyle in the adult population, the same that evidences that men had a level of sedentary lifestyle of 60,7 % (95 % CI 57 %: 63 %) and women of 84 % (95 % CI 80,1 %: 88 %), “the variables that explained the level of sedentary lifestyle in the population were: age ($p=0,03$), gender ($p=0,00$), weekly frequency of PA practice ($p=0,00$), hip perimeter ($p=0,042$) and Initial heart rate ($p=0,00$).”⁽³⁾

Chronic noncommunicable diseases, known as NCDs, cancer, and respiratory diseases, are among the leading causes of death of Quiteños. Likewise, “60 % of the capital’s inhabitants do not engage in physical activity and only 2 % exercise. This factor added to the environmental and urban conditions derives in the affections”; these characteristics increase mortality in Quito and almost all of Ecuador.⁽⁴⁾

In the province of Santo Domingo de las Tsáchilas, the initiative of the ciclo paseo was implemented to promote physical activity because around 89 % of Ecuadorians have sedentary habits, and 22 % are obese. These health problems involve all of us, so the municipal government encouraged these sports activities as the best preventive medicine.⁽⁵⁾

There is controversy in specifying a permanent concept for quality of life, which is why no defined meaning exists.⁽⁶⁾ In general, they refer to a property that the individual has to experience in the situations and conditions of their environment, depending on the interpretations and assessments made of the objective aspects of their environment to the quality of life.⁽⁷⁾

Objective quality of life and perceived quality of life are two complementary and interacting factors. Lifestyles are composed of physical, material, and social factors. On the other hand, quality of life would be subjective and objective, which makes it a property of the individual rather than of the environment in which he or she moves.⁽⁸⁾

The practice of physical activity is essential for good physical and mental functioning. One risk factor that most compromises cardiovascular and metabolic health is a sedentary lifestyle, which acts independently of a person’s PA levels. This validates how crucial it is to comply with PA recommendations to combat, control, and reverse the development of pathologies or preventable chronic diseases. It also constitutes a warning since the benefits of physical activity can be considerably reduced due to sedentary lifestyles. The benefits of PA could be diminished by excessive sedentary time.⁽¹⁰⁾

Therefore, the objective of this review article is to characterize the effect of physical exercise on the health and well-being of individuals.

METHOD

The available literature was reviewed using articles retrieved from SciELO, Scopus, and ClinicalKey databases. Filters were used to select articles in English and Spanish, and empirical methods such as logical history, analysis, and synthesis were used to collect and understand the information obtained. The terms “Physical Activity,” “Health,” “Physical Exercise,” and “Quality of Life” were used as keywords in the article. A

total of 15 references addressing different considerations on the importance of physical exercise for the health and well-being of individuals were selected.

RESULTS

Physical activity is considered the factor that intervenes in people's health and is the best method to prevent obesity. The primary tool is preventing being overweight, which is understood as "any body movement produced by skeletal muscles that produces an energy expenditure above the basal metabolic rate. It encompasses daily routine activities, such as housework and work". Included in this concept are activities that require some degree of effort, such as brushing teeth, moving from one place to another to meet requirements, cleaning the house, cleaning the car, playing a strenuous sport, and many other activities that people do.⁽⁹⁾

Aquieta Cevallos ZA *et al.*⁽⁶⁾ carried out the thesis entitled "Diet quality, physical activity level, and phase angle in Ministry of Defense personnel" to identify the influence of physical activity level and diet quality on phase angle in a healthy adult population belonging to the Joint Command of the Armed Forces. This study was observational, cross-sectional, and analytical, with a non-probabilistic sampling by convenience, and 145 adults between 25 and 46 years of age participated. The information and data were collected with a registration card, the phase angle by InBody S10 bioimpedance, the quality of the diet was obtained using the Healthy Eating Index (HEI), and the level of physical activity using the International Physical Activity Questionnaire short version (IPAQ). It concluded that a better quality diet and adequate physical activity contribute to maintaining cellular integrity, decreasing the probability of presenting a low phase angle in a healthy adult population.

There are several positive effects of physical exercise at the physiological level. Practicing constant physical exercise puts the muscles to work more than usual with activities not part of the daily routine; exercising has various physical and mental benefits and plays a vital role in preventing chronic noncommunicable diseases.⁽¹¹⁾

Contreras LA *et al.*⁽⁸⁾, in their thesis on "Eating Habits, Physical Activity and Level of Academic Stress in Students of a Private University in East Lima, 2019", objective was to determine the relationship between eating habits, physical activity, and level of academic stress in students aged 18 to 35 years of a private university in East Lima, had a quantitative approach, cross-sectional, non-experimental design, and descriptive correlational type. The sample consisted of 230 university students, with the result that 62,6 % of the participants presented adequate eating habits, 63,5 % presented moderate physical activity, and 59,1 % presented moderate academic stress. Spearman's Rho statistical test was used as an instrument. It was concluded that students with a lifestyle based on good eating habits and a moderate practice of physical activity lead to better stress control in a university environment.

The constant practice of physical exercise improves and strengthens the immune system, helping to preserve the integrity of the cells in the body; therefore, when there is some type of pathology that wants to alter the homeostasis of the body, the immune system will have enough weapons to fight the pathogen and that this does not advance through the body causing damage that sometimes are irreversible and compromise the integrity of health.⁽⁷⁾

It has been demonstrated that practicing physical exercise during the first years of life can make a difference in the excellent condition of the bone system, cardiovascular resistance, lower blood pressure, and lower weight and obesity. It should be emphasized that physical activity helps to counteract various severe diseases in different body systems, such as the cardiovascular system, bone system, and circulatory system, as well as some cancers, such as colon and breast cancer and type 2 diabetes mellitus, among others.⁽¹⁾

The practice of physical activity is also related to the reduction of symptoms of fatigue, stress, depression, and anxiety, as well as some other psychological disorders, as well as helping to increase self-esteem and improve mood. As mentioned in the previous paragraph, the effects of practicing physical exercise are innumerable. Therefore, constant practice will help prevent practically all chronic noncommunicable diseases, and the body will be more vigorous and ready for hard work.⁽¹¹⁾

An alarming figure of 3,2 million individuals die each year on the planet due to sedentary lifestyles, and the WHO mentions that this is becoming the fourth most important risk factor associated with mortality. However, during the last few years, a "sedentary lifestyle" has become a significant risk factor associated with chronic non-communicable diseases and mortality. While it is known that the two concepts (physical inactivity and sedentary lifestyle) are widely related, it is crucial to understand that they are not the same and that both act independently on our health.⁽¹²⁾

For centuries, science has demonstrated the relationship between a person's health and the food they eat. In this 21st century, the proportion of these cases has increased; people who consume saturated fats and cholesterol are more likely to suffer heart-related pathologies. Poor diet and lack of physical activity play an essential role in health. Physical activity provides benefits independent of nutrition; nutrition is a preoral and voluntary process, while nourishment is a pastoral and involuntary process; this is why healthy eating is fundamental to improving people's physical and mental condition. Decisions about food, nutrition, and physical activity often rest with women and are based on culture and traditional diets. "Programs aimed at

promoting healthy diets and physical activity in human beings to prevent disease are critical tools for achieving development goals.”⁽¹³⁾

On the other hand, knowing what foods should be ingested after training to supply the energy demand will help us achieve the optimal recovery of tissues subjected to physical exercises. Thus, protein intake is recommended for muscle repair, and fruits and vegetables should also be consumed to replenish electrolytes lost during exercise and provide vitamins to the body.⁽¹³⁾

A balanced diet is an essential part of a healthy lifestyle. Other elements of daily life, such as physical activity, smoking or not, or stress, also significantly influence health (de Backer, 2003). (Kromhout, 1989) In recent decades, food consumption habits have evolved, especially in Mediterranean countries, from a traditional diet to food consumption that is more typical of European societies, increasing animal fat consumption in total energy intake and decreasing complex carbohydrates and vegetable fiber. In our culture, the consumption of processed and precooked foods is becoming more and more common, leaving aside fresh and healthy foods. Specific changes in eating habits have also been evidenced, such as an increase in the number of meals in the street, which can be dangerous. “certain habits associated with eating have been modified, such as the time spent sitting down to eat with other diners, or the time spent napping after the midday meal.”⁽¹⁴⁾

A balanced diet and physical exercise are important to maintain health and enjoy a good state of mind. It is essential to know what types of nutrients our body needs to maintain optimal conditions, thus avoiding excessive consumption of foods that could be harmful to the body, such as saturated fats, trans fats, sugars, and unnecessary carbohydrates.⁽¹³⁾

Types of physical activity

There are different types of physical activity, and these are adapted according to the resistance capacity of a person; this is in order to know and know the physical conditioning of each individual in order to work safely, and that there are no risks when practicing physical exercise, this level of activities is divided into three.⁽¹⁵⁾

Low physical activity

In this level of physical activity, a sensation of heat can be felt; it is not so suffocating, and there is also a slight increase in the rhythm of breathing and the rhythm of the heartbeat due to the physical activity that began to be practiced. Some examples of low physical activity are gentle walks, gardening, and stretching.⁽¹⁵⁾

Moderate physical activity

This level of PA, as its name indicates, is moderate; the metabolic equivalent goes from 3 to 6 METs. Here, the person will feel how the sensation of heat increases gradually, starting with a slight sweating; the heart rate and breathing rate increase, but still allows us to speak or gesture words. Some examples of moderate physical activity are walking outdoors, cycling, dancing, swimming, and carrying loads of less than 20 kg.⁽¹⁵⁾

Intense physical activity

Intense or vigorous PA is considered when the sensation of heat and sweating is high, the metabolic equivalent is above 6 METs, breathing is difficult, shortness of breath, and it is impossible to gesticulate words. The heart rate is elevated. Some examples of vigorous physical activity are fast dancing, athletics, basketball, Olympic gymnastics, pole vaulting, calisthenics, and lifting weights over 20 kg.

The different levels of PA allow us to know each person's physical condition, and it is in this way that an adequate exercise plan can be developed for each individual to not stay within their physical limitations and avoid injuries due to poor practice.⁽¹⁵⁾

CONCLUSIONS

It is highlighted in this study that physical exercise is presented as an essential tool to achieve a healthier, happier, and fuller life. Regardless of age or physical condition, exercise can be adapted to individual needs, becoming an investment in your health and well-being in the long term due to its impact on people with social, mental, and physical benefits.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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