Articles

Prevalence of physical activity and relationship with sociodemographic factors and lifestyles.

Prevalencia de actividad física y relación con factores sociodemográficos y estilos de vida

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ABSTRACT

The practice of physical activity is an existential obligation. To determine the prevalence of physical activity and its relationship with sociodemographic factors and lifestyles. Materials and methods: Quantitative approach, descriptive and cross-sectional scope. Mean age 28.63 years; median 25; maximum 99. 25% younger than 13 years; 50% 25 and 75% older than 42. 50.3% were men and 49.7% women. 68.5% did not engage in physical activity. 57.1% non-recreational. 21.9% incomplete high school; 20.9% incomplete elementary education. 82.2% do not use tobacco, alcohol or drugs. 89.3% eat breakfast before going to school or work; 83.1% eat at home; 76.2% eat cooked food; 19.1% eat fried food. 79.7% eat 3 times a day. According to disease 172 with diabetes 23.6%; 103 with

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osteoporosis 14.1%; 255 with hypertension 35%; 104 with obesity 14.3%; acute myocardial infarction 8.2%. Age at death 58 years; 25% younger than 43 years and 75% older than 76 years. 23.6% due to acute myocardial infarction; 7.9% due to diabetes; 7.3% due to cerebrovascular accident. Low prevalence of physical activity. Sociodemographic factors related to age, educational level, morbidity and mortality.

Keywords: Physical Activity; Recreational; Lifestyles; Sociodemographic Factors.

RESUMEN

La práctica de actividad física constituye una obligación existencial. Determinar la prevalencia de actividad física y relación con factores sociodemográficos y estilos de vida. Materiales y métodos: Enfoque cuantitativo, alcance descriptivo y de corte transversal. Media de edad 28,63 años; mediana 25; máxima 99. Un 25% menor de 13 años; 50% de 25 y 75% mayor de 42. El 50.3% hombres y 49.7% mujeres. No realizan actividad física un 68,5%. El 57,1% no recreativa. El 21,9% bachillerato incompleto; 20,9% educación básica incompleta. No consumen tabaco, alcohol y drogas un 82,2%. Desayunan antes de ir a la escuela o al trabajo el 89,3%; comen en el hogar 83,1%; 76,2% alimentos cocinados; 19,1% fritos. El 79,7% se alimentan 3 veces en el día. Según la enfermedad 172 con diabetes un 23,6%; 103 con osteoporosis el 14,1%; 255 hipertensión en un 35%; 104 con obesidad el 14,3%; infarto agudo de miocardio el 8,2%. La edad al fallecer 58 años; 25% menor de 43 años y 75% mayor de 76. Un 23,6% por infarto agudo de miocardio; 7,9% por diabetes; 7,3% por accidente cerebro vascular. Prevalencia de actividad física baja. Factores sociodemográficos relacionados con edad, nivel educativo, morbilidad y mortalidad.

Palabras clave: Actividad Física; Recreativa; Estilos de Vida; Factores Sociodemográfico

INTRODUCTION

The OMS (2018) defines physical activity as bodily movement, followed by energy consumption, including during leisure time or as part of a person's work when performing household chores and recreational actions, e.g., daily life, walking, cycling, pedaling, playing sports, and walking in the park (Abalde and Pino, 2015). The expression "physical activity" should not be confused with "exercise", which is a subcategory, which is posed and repetitive. The practice of physical activity constitutes an existential obligation of human beings, it is not always clearly understood in societies, therefore, it is a situation to be solved from awareness (León and Montero, 2017, p. 276).

Sáenz-López and Castillo (2016) refer that it is important to practice physical activity regularly and constantly throughout life, because it is proven from different points of view some benefits, such as prolonging hope, quality of life, maintaining vitality, body image, preventing diseases and according to Perea- Caballero, et al. (2019) of being associated with a decrease in mortality and greater likelihood of healthy aging according to Morey (2020). In addition, being able to slow down this process, with recreational play and social sport, seeing it as a policy of right (Calero, Díaz, Caiza, Rodríguez, & Analuiza, 2016). By considering recreational exercises, in improvement of communication, expression and linkage with the environment. The game fulfills a cultural social function, which allows feeling the pleasure of sharing a common action and satisfying the ideals of expression and socialization (Marcos, 2015).

Calero, et al. (2016) additionally indicate that an international alternative would be to design and implement activities using areas for play and sports, as an improvement of self-esteem at various ages that generate a good state of mental health. For which it is important to delimit tastes and preferences of the population. Recreation as a science should be based on a motivational design, which serves as a tool for motivation. As life expectancy increases, the increase in chronic diseases and the reduction of well-being are destined to be a major global health challenge.

It should be noted that a healthy lifestyle is one in which harmony and balance are maintained in the diet, physical activity or exercise, healthy sexual life, stress management, intellectual capacity, recreation and rest. On the other hand, the consumption of tobacco, alcohol and drugs should be avoided. (Moraga, et al., p. 8). In addition, taking into account that educational level, economic income, occupation and housing condition are sociodemographic factors that intervene in health (Chavarría, Barrón, & Rodríguez, 2017), it is worth mentioning that, in developing countries, people of scarce resources have a tendency to obesity (Lima, Ferrer, Fernández, & González, 2012). Therefore, the way of life is going to vary, whether or not people have unhealthy habits, equally vulnerable if there is illiteracy and poor self-perception (Galli, Pagés, & Swieszkowski, 2017, p. 7).

On the other hand, Barbosa and Urrea (2018) state that a sedentary lifestyle leads to an unhealthy environment due to the decrease in the use of force in activities, transportation systems and the use of new technologies. It is emphasized that tobacco consumption and harmful use of alcohol favor the appearance of non-communicable diseases (Fernandez, et al., 2020). Leading to real epidemics, obesity, diabetes, cardiovascular disease and osteoporosis (Velásquez, Pichola, Sasso and Rhaiel, 2017). Even more so when considering for change of form and healthy habits, to risk factors that are mostly modifiable, linked to poor diet, smoking and especially physical inactivity (Lamotte, 2016, p. 1).

Therefore, it becomes justifiable for various institutions to design and implement action plans in the health and educational fields. Taking into consideration issues oriented not

only to the absence of disease, but also to the achievement of a well-being that puts people in relation with other social groups, with the community to which they belong and with the environment, trying to enable them to develop a good lifestyle followed by an optimal physical, psychic and social state (Vaquero, Garay and Ruiz, 2014, p. 2-3). Through information and education of unhealthy habits they can change in the acceptance of healthy ways, of a nutritious diet in quality and quantity, adoption of physical activities and recreational actions, rest, positive mental attitude, hygiene habits, spirituality independent of region they profess, prevention and care of the environment, as well as avoiding risks that compromise physical integrity (Moraga, et al., 2016, p. 5).

Therefore, PAHO (2020) also indicates that, in order to reduce health risks and economic burden, promotion becomes a regional and global priority, also in relation to "Agenda 2030 for Sustainable Development" the action plan for prevention of childhood obesity, adolescence and on daily physical activity is improved, to produce a good result both in the state and healthy condition of a person (Avila, Huertas and Sanchez, 2016).

It is worth mentioning that by actions and activities of the project "Family and Healthy Communities, in 2018, an initial health diagnosis is performed, in San Eduardo, intervening physiotherapy, medicine, nutrition, nursing and dentistry careers, Faculty of Medical Sciences, Catholic University of Santiago de Guayaquil, identifying possible potential risks related to sociodemographic factors (Galarza, Muñoz and Rodriguez, 2020, p. 5).

The objective of this study was to determine the prevalence of physical activity and its relationship with sociodemographic factors, such as age, sex, educational level, tobacco use, alcohol, drugs, diet and nutrition, morbidity and mortality, in order to identify how they influence the population of the San Eduardo community.

MATERIALS AND METHODS

Quantitative approach, numerical and non-numerical data were used, a predetermined tool was applied to test, describe and interpret the validity of the hypothesis (Hernández, Fernández and Baptista, 2014, p. 37), therefore, the Total Family Risk instrument RFT: 5-33: validated by Vice-rectorate of Liaison, Universidad Católica de Santiago de Guayaquil, regarding five sections, first four seek to identify the family, through location data; role played by participant; type and family composition; individual risks; family and institutional pathological background, fifth section, profile of community members, according to risk factors (Jaramillo, 2018, p. 3).

Descriptive scope, it sought to specify as precisely as possible the characteristics, properties, dimensions, components, profiles of people and groups discovered in the research (Díaz-Narváez and Calzadilla, 2015). The community of San Eduardo has 5,100 inhabitants, located in the Tarqui parish, Guayas province, Guayaquil-Ecuador, taking as reference data from family members of 729 households (Jaramillo, 2018, p. 4).

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It was implemented through actions and linkage activities of the "Healthy Families and Communities" Project, with the intervention of the five careers of the Faculty of Medical Sciences, Catholic University of Santiago de Guayaquil, formed by Physiotherapy, Medicine, Nutrition, Nursing and Dentistry, In 2018, students from different cycles and support teachers, who participated in the study, were trained in each of the procedures and coordinated with community leaders, who strengthened the communication of the sector of the selected population.

Observation was one of the first techniques to be employed (Baena, 2017), using a sectorized map of the area, to go house to house of the members that make up the families of 729 households of San Eduardo community, to identify possible risk potentials related to health determinants, as well as, The participants were asked key questions under the family risk instrument (RFT 5-33), endorsed by the Vice-rectorate of Liaison (Galarza, et al., et al., "The family risk instrument")., 2020). General variables included were: age, sex, educational level, tobacco use, alcohol, drugs, food and nutrition, morbidity and mortality. For the analysis of the research, descriptive statistics were performed, particularly the percentage distribution, by means of the parameter Yes or No, presented by means of graphs and tables.

RESULTS

The mean age (+ - standard deviation) was 28.63 years; the median was 25 years. The minimum age observed was 0 years and the maximum 99 years. Twenty-five percent of the population was younger than 13 years; 50% was 25 years and 75% was older than 42 years. It was observed that 50.3% of the cases were male (n=1388) and 49.7% female (n=1371), not representing significant differentiation with respect to the sex of the population. Table 1 showed a high prevalence of 68.5% (n=1891) of the population who did NOT engage in physical activity or practice any sport; 31.5% (n=868) of the population did engage in some physical exercise and among the statistical analysis of the 729 households, 57.1% (n=416) answered that they did NOT engage in recreational activities compared to 42.9% (n=313) who answered YES.

Table 1. *People who engage in physical activity, recreation or sport.*

Physical activity or sport			**Recreational activity**	
	N°	%	N°	%
NO	1891	68,5	416	**51,1**
YES	868	31,5	313	**42,9**

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TOTAL	2759	100,0	729	**100,0**

Note: Percentage analysis of people who engage in physical activity, recreational activities or play sports.

The educational level is low, 21.9% have incomplete high school; 20.9% have incomplete basic education and 8.2% have no schooling. The education index observed leads to a poor self-perception of health.

Table 2 showed that out of 599 households, 82.2% answered that they do NOT use tobacco, alcohol and drugs and the difference was that out of 130 households, 17.8% answered that they do.

Table 2. *Tobacco, alcohol and drug use*

	N°	**%**
NO	599	**82,2**
YES	130	**17,8**
TOTAL	729	**100,0**

Note: Percentage analysis of those who answered Yes or No to tobacco, alcohol and drugs.

Table 3. *Food and nutrition*

They eat breakfast before going to school.		
	N°	%
NO	78	**10,7**
YES	651	**89,3**
TOTAL	729	**100,0**
The foods they regularly eat		
	N°	%

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Cooked	2102	**76,2**
Fritos	526	**19,1**
Roasts	131	**4,7**
TOTAL	2759	**100,0**
	Where do they eat?	
	N°	%
Home	2293	**83,1**
Job	268	**9,7**
Other	172	**6,2**
School	26	**0,9**
TOTAL	2759	**100,0**

How many times are they fed per day?

	N°	%
3 times	2198	**79,7**
4 times	340	**12,3**
2 times	165	**6**
More than 4 times	41	**1,5**
1 time	15	**0,5**
TOTAL	2759	**100,0**

Note: Percentage analysis of those who answered Yes or No to the questionnaire.

Table 3 showed that 89.3% of the members of the families ate breakfast before going to school or work; 83.1% ate at home and 9.7% at work; 76.2% usually ate cooked food and 19.1% fried food. A total of 79.7% eat 3 times a day and 0.5% (15 people) eat once a day.

According to the most frequent diseases related to the study, out of a total of 762 persons, 255 had hypertension (35%); 172 had diabetes (23.6%); 104 had obesity (14.3%); 103 had osteoporosis (14.1%); 60 had acute myocardial infarction (8.2%); and 42 had cancer (5.8%).

The average age at death was 58 years; 25% were younger than 43 years and 75% were older than 76 years. Consequently, 23.6% died from acute myocardial infarction; 7.9% from diabetes; 7.3% from cerebrovascular accident and 5.2% from cancer.

DISCUSSION

In relation to the findings of the results, it was evidenced that some authors agree that lifestyles, specifically the regular performance of physical activity, healthy eating, non-consumption of tobacco, alcohol and drugs, significantly reduce the risk of having various types of chronic noncommunicable diseases associated with lack of physical activity, such as diabetes, osteoporosis, hypertension, obesity and finally acute myocardial infarction (Quilindo and Paz, 2016). In relation to sociodemographic factors, Garcia, Herazo and Tuesca (2015), found in various studies that physical inactivity has been associated with female sex, older age, socioeconomic status and participation in sports and/or recreational activities.

According to Petretto, Pili, Gaviano, Matos and Zuddas (2016), the performance of different physical exercises is key to promote a healthy life and reduce the probability of pathological aging (p. 59). Additionally, López and Santos (2016) state that physical activity is useful to prevent premature mortality from any cause, ischemic heart disease, cerebrovascular disease, arterial hypertension, colon and breast cancer, type 2 diabetes, metabolic syndrome, obesity, osteoporosis, sarcopenia, functional dependence and falls in older people, cognitive impairment, anxiety and depression. In Latin America, these diseases are the leading causes of death and the prevalence is expected to continue to increase by 50.0% of diabetes cases by 2030 (Gonzalez, Sarmiento, Lozano, Ramirez and Grijalba 2014). Likewise of deaths worldwide, in low and middle income countries (Mancipe, et al., 2015).

Families with low economic income and low educational level have less access to health systems, healthy food or facilities to practice physical-sports activities. A European study confirmed the relationship of the effects of parental education on the body composition of children, mediated by the composition of breakfast, sports participation, watching television or the use of electronic devices (Rodríguez, et al., 2016) and related to sociodemographic factors such as age, educational level and lifestyles (Vásquez and Macías, 2019). In food preference there is an important influence of the family and the

social environment, which can be modifiable with educational work aimed at the knowledge of the characteristics of healthy eating (Cori, 2018).
There are few studies in Ecuador that offer global information on the prevalence of physical activity and its relationship with sociodemographic factors. Hence, this research on the results obtained from the database of the Healthy Families and Communities Project, contributed to the knowledge of the risk factors that affect the state of health and increase the probability of getting sick in a representative Ecuadorian population, affecting performance, production and social life (Medranda, 2020).

CONCLUSIONS

The study population was delimited by the prevalence of physical activity and its relationship with sociodemographic factors and lifestyles of the members that make up the families of 729 households in the San Eduardo community, "25 de Julio y Virgen del Cisne" cooperatives, Tarqui parish, Guayaquil canton, Guayas province (Galarza, et al., 2020, p. 5).
In the present study, a high rate of 68.5% of people who do not engage in physical activity was analyzed, as well as the relationship with the disease variable such as diabetes (23.6%), osteoporosis (14.1%), hypertension (35%), obesity (14.3%) and, finally, acute myocardial infarction (8.2%). Moncerrate, Espinoza, Meneses and Macias (2020) conclude that disease is the usual companion of the poor, a kind of mystery that breaks down social life and produces a great economic imbalance.
It was observed that physical activity performed in leisure time decreases with age and due to the availability of time for work. It was observed that 75% of those over 42 years of age do not engage in recreational activities and 57.1% in both sexes. The average age at death was 58 years. Consequently, 23.6% died from acute myocardial infarction, 7.9% from diabetes, 7.3% from stroke, and 5.2% from cancer.
According to lifestyle, it was related to unhealthy habits, 18.8% if they use tobacco, alcohol and drugs; in food and nutrition, 19.1% eat fried food; 10.7% do not eat breakfast before going to school or work.
Likewise, the San Eduardo community will be vulnerable due to the low educational level of 51% of the population and poor self-perception of health due to lack of knowledge. According to Giler and Alcívar (2020), they indicate that society should be informed about the conditions it is facing and how it can be managed, in order to maintain or improve the state of health, including practical guidelines as a key healthy point.

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