

Analysis of Risk Factors Associated with Hypertension in Adults and Prevention Strategy

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Abstract

Hypertension constitutes a relevant public health problem and is one of the main causes of mortality and morbidity worldwide, its complications imply high costs in treatment and deterioration of quality of life. The objective of the research was to determine the risk factors associated with arterial hypertension in adults between 40 and 65 years of age who attend the Cristóbal Colón health center.

Methodology: mixed modality, combining the qualitative-quantitative paradigm, descriptive level, field, the population was made up of 68 adults, the technique used for data collection was the survey and the instrument the FANTASTIC questionnaire that allows measuring the styles of life.

Results: approximately 76% of the respondents do not have a history of hypertension, 44% lead a sedentary life, 35% frequently consume salt, fat and junk food, and 31% have a smoking habit from 1 to 10 times a week.

Conclusions: the identification of risk factors allowed to propose an educational plan according to the needs of the population and the functions of professionals inherent to nursing, such as: promotion, education and prevention, which allow expanding control over their own Health.

Keywords: Risk factors, hypertension, Education.

Introduction

Arterial hypertension (HTN) is a continuous elevation of blood pressure (BP) above established limits. They have been identified from an epidemiological point of view as an important cardiovascular risk factor for the general population. And cardiovascular morbidity and mortality have been shown to have a continuous relationship with systolic and diastolic BP levels (1).

Worldwide, cardiovascular diseases are responsible for approximately 17 million deaths per year; the prevalence of hypertension is around 30-45%, and it is one of the most important risk factors for the development of cardiovascular disease. HBP is the most common condition seen in primary care, accounting for at least 45% of deaths from heart disease and 51% of deaths from cerebrovascular event (CVD) (2).

In Ecuador, the prevalence of the disease is 9.3% (3). Representing the third cause of death in the country may be due to the population increase of older adults in recent years which has tripled; as well as lifestyles and their modification to achieve healthy aging, all this has taken off in recent years in the country.

Age is one of the risk factors for triggering high blood pressure levels, a history of high blood pressure, non-physical exercise, high salt intake, a history of family members with hypertension and obesity (4).

According to the National Development Plan for a Lifetime 2017-2021 (5), Ecuador will advance in its guarantee of the right to health thanks to the promotion of healthy lifestyle habits, aimed at disease prevention. It is proposed that Ecuador reduce its levels of sedentary lifestyle, improve citizen eating patterns and increase physical activity in all groups, regardless of age. This will help reduce stress levels and the number of deaths from cardiovascular diseases including hypertension.

Likewise, in accordance with the "2030 Agenda for Sustainable Development" (6), it is stated that the Strategy for the prevention and control of noncommunicable diseases and the Ten-Year Plan for Sport, Physical Education and Recreation, start from the identification of risk factors for contracting chronic noncommunicable diseases, in order to provide services aimed at counteracting them, such as education in healthy eating and reduction of harmful use of alcohol, tobacco and other drugs; promotion of physical activity through sports and recreational activities; and comprehensive care for the recovery of the state of health, once the disease is contracted.

It is imperative that the staff of the first level of care as a gateway, strengthen these strategies to improve the quality of life of the population, which is affected by risk factors that trigger the disease and multiple complications.

In Mexico, although there have been programs and clinical practice guidelines for the care of hypertension, there is no recent evidence to evaluate whether biological and sociodemographic risk factors affect the prevalence of hypertension in adults. (7),

Even so, it is assumed that by knowing the risk factors that can contribute to the development of hypertension these can be reduced and thus affect the appearance of the disease.

The increasing prevalence of hypertension is attributed to the increase in the population, its aging and risk factors related to behavior, such as: unhealthy diet, harmful use of alcohol, physical inactivity, overweight or prolonged exposure to stress (8).

Currently, the risk factors associated with the development of hypertension in Chile, such as early detection, appropriate treatment and control of hypertension, produce important health and economic benefits, so early identification of people who could be at greater or lesser risk of developing it is essential (9).

Likewise, "In Ecuador, the Good Living of People program has been promoted, as the central axis of health, by trying to reduce the risk factors mentioned here, promote and rescue traditional practices from the natural point of view; That is, it is intended that through culture the appropriate ways of leading a healthy life are identified to achieve the individual and collective well-being of all people, without any type of exclusion (10).

Therefore, arterial hypertension (HTN) is a recognized health problem, both for its high frequency, for the consequences and disabilities it causes, as well as for its impact on mortality. However, on few occasions in the history of medicine there have been so many misunderstandings and errors, as in the history of HTN, so even in our days, it does not seem easy to determine, unequivocally, who are really hypertensive and who are not, in a community, or in individual medical care to a person. at any given time. In addition, it is also difficult to maintain adequate and stable control of those who are already considered hypertensive (11).

It is thus necessary that the population recognizes warning signs, although this is an easily detectable pathology, in many cases it can be asymptomatic, and above all understand the importance of leading a healthy lifestyle, since high blood pressure is a disease that can have lethal consequences and very serious complications for the person.

In the Christopher Columbus Health Center, it is evident that a large number of adults aged between 40 and 65 years attend, with blood pressure figures above normal values which could be related to their habits and / or lifestyles, even when there is a hypertensive club in the unit. Patients do not always come, it is also important to highlight that this represents an important risk factor for complications of cardiovascular diseases secondary to this, affecting the quality of life of those who suffer from it; In addition to having a considerable impact within the society and economy of the Ecuadorian State.

Objective: To determine the risk factors associated with hypertension in adults aged 40 to 65 years attending the Christopher Columbus Health Center

Materials and Methods

The present research had a paradigmatic approach "Quantitative" A descriptive, cross-sectional study was carried out, according to its design it was non-experimental since there was no manipulation of the variables with elements of action research, The population was made up of 68 adults between 40 and 65 years who attend the Christopher Columbus health center.

Research Technique and Instrument.

The technique used for data collection was the survey, For the application of the survey adults aged 40 to 65 years were asked to answer a series of questions belonging to the international questionnaire. FANTASTIC that allows you to measure lifestyles. This is a valid instrument designed in the Department of Family Medicine of McMaster University in Hamilton, Ontario (Canada), considered a tool to support professionals in the context of health promotion and disease prevention; It allows to identify and measure lifestyles. The questionnaire is characterized by being a short and simple tool; has as few questions as possible; Each dimension tries to be represented as much as possible by those questions that imply greater objectivity in the answer; adjusted to the study population and, therefore, modified according to their preferences and language; with an integrative vision that facilitates knowing an overview of lifestyle through dimensions: A: physical activity, N: nutrition, T: toxicity A: alcohol, S: sleep and stress.

Data Processing

For the processing and analysis of the results, first of all we started from techniques of tabulation, grouping and synthesis of the results acquired. Descriptive statistics were used through absolute numbers and percentages. and then the results were graphed and comparisons and interpretations were established that value each of the aspects.

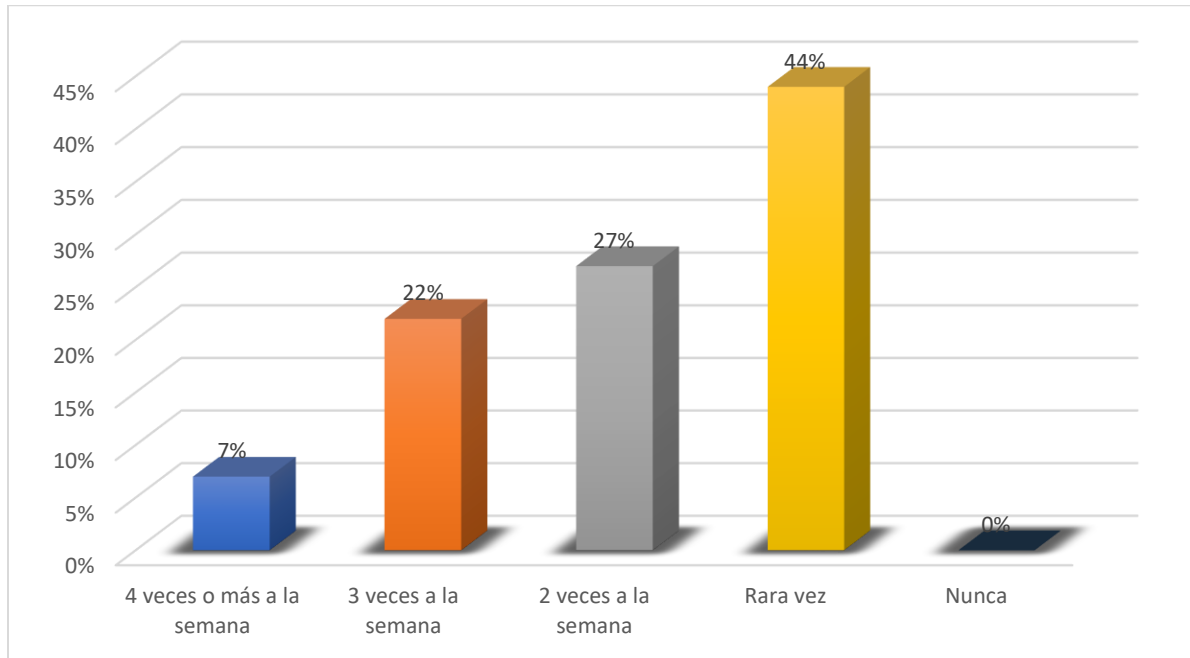
Ethical aspects

Within research ethics, the following aspects will be respected:

- Informed consent.
- Privacy, intimacy, confidentiality and anonymity.
- Ethical review of research protocols.

Results

Figure 1 Factor: Physical activity.



Source: FANTASTIC Survey.

Data analysis and interpretation. 44% of the surveyed population affirms that they rarely perform any type of physical activity, generating this a risk factor for multiple diseases including cardiovascular diseases such as hypertension due to sedentary life, on the other hand 27% if they perform physical activity 2 times a week, 22% 3 times and 7% 4 times or more, Among these activities is walking, climbing stairs or practicing a sport that favors reducing the chances of suffering from hypertension among other diseases.

Discussion

As Villarreal puts it, et-al. (12), in his article, although hypertension is a disease with multifactorial origin, the weight of heredity cannot be ruled out, considering the genetic load. There are reports that indicate that in hypertensive population the history of hypertension has been identified in direct relatives between 30 and 60% of cases.

According to Moraga (13), it is stated that physical training is widely recognized as part of the therapeutic management of hypertension. The hypertensive patient should be guided and motivated to perform physical exercise to improve their blood pressure and reduce their coronary risk factors. Exercise in these populations has proven to be a good therapeutic tool. It has been seen that physically active hypertensive patients have a lower mortality rate than sedentary patients.

As Gamboa puts it, et-al. (14), the consumption of plant foods plays a fundamental role in the prevention of Chronic Noncommunicable Diseases (CNCD) due to its protective effect against some cardiovascular diseases. There is evidence that a minimum consumption of Fruits and Vegetables (FV) of 400 g per day decreases the risk of cardiovascular diseases.

According to Valenzuela and Atalah (15), they state that, it is widely demonstrated, that salt consumption is strongly associated with blood pressure (BP) levels and that an excess determines a greater risk of mortality, current salt

consumption exceeds by more than double the recommended intake, which has been associated with the development of cardiovascular diseases.

Magrini and Martini (16) also state that obesity and weight gain are strong and independent risk factors for hypertension; It is estimated that 60% of hypertensive patients are more than 20% overweight.

Tobacco consumption causes an acute elevation of BP and heart rate by action of the sympathetic system, there is evidence that tobacco consumption causes a temporary increase in BP levels for both hypertensive and normotensive individuals, smoking could be associated with a pattern of BP variability that predicts greater cardiovascular risk and / or nocturnal hypertension. (17)

From Valenzuela's point of view (18), he points out that, in hypertension, caffeine can increase plasma levels of stress-related hormones, such as adrenaline, noradrenaline and cortisol, so a hypertensive effect derived from coffee consumption could be expected, since the secretion of these hormones is stimulated by caffeine.

The chronic ingestion of ethanol at high doses causes a significant increase in the values of systolic and diastolic pressures, however a beneficial effect has been attributed to ethanol as a protector of the cardiovascular system when ingested in moderate doses. (19)

According to Molero, et-al. (20), in a specific situation of stress, a series of characteristic chemical changes occur in the cardiovascular system, mediated by the activation of the sympathetic nervous system. These changes include increased heart rate and constriction of the major arteries, which causes an inevitable increase in blood pressure.

Conclusions

- The diagnosis of the current situation showed that there is a large percentage of people who maintain inadequate lifestyles, including sedentary lifestyle, excessive intake of salt, sugar, fats, junk food, stress, fruits and vegetables in small quantities, consumption of tobacco and alcohol, risk factors that attribute the appearance of hypertension.
- Based on the needs of the population based on the identification of risk factors through the FANTASTIC instrument, health promotion is a useful strategy for nursing professionals aimed at improving lifestyles, in order to reduce the risk factors associated with hypertension in adults aged 40 to 65 years who attend the Christopher Columbus Health Center.

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