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*Research Article*

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# Educational Strategy for the Control of Risk Factors of Ischemic Heart Disease in Older Adults. Sancti Spíritus, January-December 2023

**Abreu Hernández Yuniel[1*], Cañizares Gorrín Yoanka[2], Daimara Barrera Leon[3], Yamil Fidel García Guevara[4], and Yaneisy Valdez Gutiérrez[4]**

*[1]Assistant Professor, Camilo Cienfuegos General Hospital, Clinical Area Department, 1st and 2nd Degree Specialist in Comprehensive General Medicine; 1st and 2nd Degree Specialist in Internal Medicine; Sancti Spíritus, Cuba*

*[2]Instructor Professor, Camilo Cienfuegos General Hospital, Clinical Area Department, 1st Degree Specialist in Comprehensive General Medicine; 1st Degree Specialist in Internal Medicine. Sancti Spíritus, Cuba*

*[3]Assistant Professor, Camilo Cienfuegos General Hospital, Clinical Area Department. Bachelor's Degree in Nursing. 1st degree specialist in Geriatrics and Gerontology. Sancti Spíritus, Cuba*

*[4]Instructor Professor, Camilo Cienfuegos General Hospital, Clinical Area Department, 1st Degree Specialist in Internal Medicine. Sancti Spíritus, Cuba*

**[*]Corresponding author:**
Abreu Hernández Yuniel, Assistant Professor, Camilo Cienfuegos General Hospital, Clinical Area Department, 1st and 2nd Degree Specialist in Comprehensive General Medicine; 1st and 2nd Degree Specialist in Internal Medicine; Sancti Spíritus, Cuba.

**Abstract**

**Introduction:** Ischemic heart disease is a disease caused by an imbalance between myocardial oxygen supply and demand, due to organic or functional lesions. This entity is highly prevalent in the study area. To deal with this problem, the essential **objective** of this research is: to propose an educational strategy for the control of risk factors of ischemic heart disease in patients over 60 years old, belonging to the CMF № 4 of the Carlos J. Finlay Polyclinic of Sancti Spíritus in the period from January to December 2023. **Methods** of the theoretical, empirical and statistical levels were used, using a longitudinal PR experimental study in 114 patients. The information was collected through the preparation of a semi-structured interview and a survey that was applied to the sample in order to evaluate the effectiveness of the proposed strategy. The information was mechanically processed using the SPSS version 19.0 statistical package and its analysis was performed using descriptive statistics. **The results** showed that the age with the highest propensity to present risk factors for ischemic heart disease was concentrated in the range of 60-70 years, the female sex predominated, the main risk factors associated with the entity were arterial hypertension, sedentary lifestyle and hypercholesterolemia, the level of information after applying the strategy was high and its application was significant, so it was **concluded** that the influence of the proposed educational strategy was highly significant.

**Keywords:** Ischemic Heart Disease, Elderly, Risk Factors, Prevention.

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## Introduction

The prevention of diseases and their complications are important aspects for contributing to the achievement of individual, family, and social health. In the developed world, PHC has been predominantly "selective," concentrating its efforts on a few high-impact interventions that have targeted the most prevalent causes of infant mortality and some infectious diseases. Only very few countries have successfully implemented a more comprehensive and national approach to PHC, although some others appear to be moving toward more comprehensive approaches [1,2]. As a result of the implementation of PHC in Cuba, life expectancy has increased for all ages. This trend reflects an accelerated process of population aging, placing the country among the oldest in Latin America and the Caribbean. It is predicted that within two or three decades, it will be the oldest in the region. According

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to projections from the United Nations Population Division, by 2050, 38.0 percent of the country's population will be 60 years of age or older, which would place the country in eleventh place worldwide [2,3]. There is strong evidence that the aging of the Cuban population constitutes one of the most important demographic and social implications derived from the decline in fertility and the decrease in mortality.

Cardiovascular disease is the leading cause of death in Cuba and worldwide, affecting not only people over 60 years of age but also all age groups below. which continues to increase and has become a true pandemic that respects no borders" stated by the World Health Organization (WHO) in 2009 is nothing more than a reminder of what was warned back in 1969 by its Executive Committee: "The greatest epidemic in humanity: cardiovascular disease has reached enormous proportions and is increasingly affecting younger people. In the coming years, it will become humanity's largest epidemic if we are unable to change this trend by concentrating research efforts on its cause and prevention." Today, this disease affects both men and women under 75 years of age, reaching mortality rates of 42% in women and 37% in men. Knowledge of the Risk Factors (RF) involved is essential for achieving adequate prevention [4]. One of these disorders is ischemic heart disease (IHD), which causes more deaths and disabilities and has a higher monetary cost than any other disease in developed countries. It is the most common, serious, chronic, and dangerous disease in the United States, where more than 12 million people suffer from it, more than six million suffer from angina, and more than seven million have suffered a myocardial infarction [5-8]. In Spain, according to the National Ischemic Heart Disease Strategy, it is also the leading cause of death; In 2006 alone, it caused 123,867 deaths [8-10].

The incidence of this disease reportedly increases with age, peaking between 50 and 65 years of age. It affects men more frequently, with the age group under 45 being 10 times more common in men than in women; between 45 and 60 years of age, it is twice as common in men, and at older ages, the incidence tends to be even. In women, menopause and the use of oral contraceptives increase the risk of coronary heart disease; the latter, which tend to raise blood pressure, have been shown to strongly interact with other risk factors. It is also closely related to a diet rich in fats and carbohydrates, smoking, and a sedentary lifestyle [4,5,7]. With urbanization in the developed world, risk factors for ischemic heart disease are increasing rapidly. A significant increase in ischemic heart disease is expected, likely to become the most common cause of death by 2030 [4].

Cuba is not exempt from this painful international panorama. Heart disease is reported to be the leading cause of death and the second leading cause of potentially lost years of life, surpassed only by malignant tumors. In recent years, an increase in mortality due to these diseases has been observed. In 2017, the crude rate was 187.3 per 100,000 inhabitants, with a total of 21,048 deaths. Ischemic heart disease caused a total of 16,280 deaths in 2020 and 16,774 in 2021, with rates of 145.8 and 149.4, respectively [11]. In the province of Sancti Spíritus, they are the second leading cause of death, surpassed only by malignant tumors, which in 2020 caused 939 deaths, with a crude rate of 201.5 per 100,000 inhabitants. Currently, a total of 10,740 patients affected by ischemic heart disease are being treated in the province of Sancti Spíritus. The incidence in 2020 was 391. Both the prevalence and incidence show a significant increase compared to previous years [12]. Considering this background, it was decided to develop an educational strategy for the control of risk factors for ischemic heart disease in the health area of the Family Medical Office (CMF) No. 4 of the Carlos Juan Finlay Polyclinic, belonging to area two of the municipality of Cabaiguán, in the period from January to December 2023.

## Materials and Methods

A pre-experimental intervention study was conducted with the aim of developing an educational strategy for managing ischemic heart disease risk factors in older adults from January to December 2023. The study population consisted of all older adults who did not have the condition at the time of the study but had at least one risk factor (114 patients) belonging to the CMF No. 4 health area. The study population was matched to the sample (N = 114), and inclusion and exclusion criteria were used.

The intervention was applied to the 114 patients included in the study, using participatory group techniques (Appendix 1). Theoretical, empirical, experimental, and statistical methods were considered for the development of the research. To achieve the research objectives, variables were defined for each of the units of analysis, which were broken down by objectives and grouped according to dimensions.

- Age
- Educational level
- First-line IQ screening
- Sex
- Body mass index
- Obesity
- Sedentary lifestyle
- Hypercholesterolemia
- High blood pressure app
- Diabetes mellitus app
- Smoking
- Control
- Applicability of the strategy in Primary Health Care
- Feasibility of the strategy for introduction in Primary Health Care
- Need for the introduction of the actions
- Relevance of the strategy
- Current status and scientific level

The information collected in the medical interview and the assessment guide was processed electronically. A database was created on a Pentium IV computer using SPSS version 19.0. Its analysis was performed using descriptive statistics, using the frequency distribution of quantitative and/or qualitative data. This allowed for the creation of statistical tables (including absolute frequencies, proportions, and percentages) in which the results were presented.

The research presented here included three stages:
**Stage One**: Diagnostic Stage

- Characterization of the study population according to sociodemographic variables.

- Identification of the main risk factors associated with ischemic heart disease in the older adult population.
- Identification of the level of knowledge of the risk factors associated with ischemic heart disease.

**Second Stage**: Proposal Design. (Annex 1)

**Third Stage**: Validation of the actions and activities proposed in the strategy by expert criteria.

**Fourth Stage**: Verification of the influence of the implemented educational strategy

## Ethical Aspects

This study received approval from the Scientific Council of the Carlos J. Finlay Polyclinic in Area 2 of Cabaiguán, and was submitted for consideration by its Ethics Committee. Prior to the execution and application of the instruments to be used for primary data collection, the objective was explained to the selected population in order to obtain their consent for inclusion in the research. The integrity of the data obtained in the study was safeguarded and respected in the publications generated, maintaining ethical principles for patients at all times, in accordance with the ethical principles for medical research involving humans established in the Declaration of Helsinki, as amended at the 52nd General Assembly in Edinburgh, Scotland, in October 2000. (2)

## Results

**Table 1: Distribution of older adults by level of information before and after the educational strategy was implemented. CMF No. 4. Carlos J. Finlay Polyclinic, Sancti Spíritus. January to December 2023.**

| Time of application | Information level | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Low | | Half | | High | | Total | |
| | No. | % | No. | % | No. | % | No. | % |
| **Before** | 95 | 83,3 | 14 | 12,2 | 5 | 4,38 | 114 | 100 |
| **After** | 3 | 2,63 | 7 | 6,14 | 104 | 91,22 | 114 | 100 |

Source: Survey p ≤0.005

After implementing the educational strategy (Annex 1), it was observed that 91.2% of patients had a high level of knowledge about the risk factors for ischemic heart disease.

**Table 2: Distribution of older adults by level of information in relation to their educational level before and after the educational strategy was implemented.**

| Nivel de escolaridad | Total | | Appropriate responses Before | | Appropriate responses After | |
|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % |
| **Unfinished primary school (PST)** | 21 | 18,4 | 6 | 5,26 | 18 | 15,78 |
| **Primary school completed (PT)** | 31 | 27,19 | 8 | 7,0 | 29 | 25,43 |
| **Unfinished secondary school (SST)** | 3 | 2,63 | 1 | 0,87 | 2 | 1,75 |
| **High school completed (ST)** | 21 | 18,42 | 12 | 10,5 | 21 | 18,42 |
| **Middle Technician (TM)** | 10 | 8,77 | 7 | 6,14 | 9 | 7,89 |
| **Unfinished pre-university (PUST)** | 3 | 18,42 | 1 | 0,8 | 2 | 1,75 |
| **Pre-university completed (PUT)** | 12 | 27,19 | 9 | 5,2 | 12 | 10,5 |
| **University (U)** | 11 | 2,63 | 10 | 7,0 | 11 | 9,6 |
| **Total** | 114 | 100 | 54 | | 102 | 89,47 |

Source: Survey p ≤0.005

The predominant level of education in the study was completed primary school.

**Table 3: Distribution of older adults according to blood pressure control before and after the educational strategy was implemented.**

| Blood pressure | Before | | After | |
|---|---|---|---|---|
| | No. | % | No. | % |
| **Controlled** | 50 | 52.0 | 72 | 75 |
| **Not controlled** | 46 | 47.9 | 24 | 25 |
| **Total** | 96 | 100 | 100 | 100 |

Source: Semi-structured interview

It can be observed how the proportion of older adults with controlled hypertension increased by 23 percentage points, a statistically significant figure (p < 0.000).

**Table No. 4: Distribution of older adults according to total cholesterol levels before and after the educational strategy was implemented.**

| Total Cholesterol Figures. (CT) | Before | | After | |
|---|---|---|---|---|
| | No. | % | No. | % |
| **Desirable limit: ≤5,17 mmol/L** | 27 | 23,6 | 78 | 68,42 |
| **High limit: 5,18 - 6,22 mmol/L** | 33 | 28,9 | 22 | 19,29 |
| **High: ≥ 6, 23 mmol/L** | 54 | 47,3 | 14 | 12,28 |
| **Total** | 114 | 100 | 114 | 100 |

Source: Semi-structured interview

After implementing the strategy (Appendix 1), 68.42% of the total sample reached desirable levels for total cholesterol, and 41

patients showed decreased serum TC levels, representing 42% of the total sample.

**Table 5: Distribution of older adults according to Body Mass Index before and after implementing the educational strategy.**

| Body mass index | Before | | After | |
|---|---|---|---|---|
| | No. | % | No. | % |
| 1. Low weight | 3 | 2,63 | 3 | 2,63 |
| 2. Normal weight | 21 | 18,42 | 77 | 67,54 |
| 3. Overweight | 55 | 48,24 | 19 | 16,6 |
| 4. Obese | 35 | 30,70 | 15 | 13,15 |
| Total | 114 | 100 | 114 | 100 |

Source: Semi-structured interview

It was observed that 67.54% of patients achieved an adequate body weight, and 56 patients achieved positive changes in their body mass index.

**Table 6: Distribution of older adults according to sedentary lifestyle before and after the educational strategy was implemented.**

| Sedentary lifestyle | Before | | After | |
|---|---|---|---|---|
| | No. | % | No. | % |
| Sedentary | 106 | 92,9 | 22 | 19,2 |
| Not sedentary | 6 | 5,26 | 92 | 80,7 |
| Total | 114 | 100 | 114 | 100 |

**Source: Semi-structured interview.**

It revealed that 80.7% of patients engaged in some type of regular physical activity, indicating a 75-percentage point increase in the number of non-sedentary patients.

**Table No. 7: Distribution of older adults according to smoking habits before and after the educational strategy was implemented.**

| Number of older adults who smoke | Before | | After | |
|---|---|---|---|---|
| | No. | % | No. | % |
| Smokers | 26 | 22 | 11 | 9 |
| Non smoking | 88 | 77,1 | 103 | 90,3 |
| Total | 114 | 100 | 114 | 100 |

Source: semi-structured interview

It was observed that the number of smokers was reduced by 13 percentage points, with non-smokers constituting 90.3% of the sample after the strategy was implemented.

## Discussion

The distribution of older adults by level of information before and after the implementation of the educational strategy (Table 1) showed that the level of knowledge was low in 83.3% of the total sample, medium in 12.2%, and high in 4.38%. This could be explained by the low level of education of the study sample. Although they know that some risk factors such as smoking, Diabetes Mellitus, and HBP affect individuals' health, they believe that the former is more related to tumors. The latter and third, respectively, are not seen by them as risk factors for other diseases, but rather as independent entities for which they have a low perception of risk if they do not maintain an appropriate lifestyle.

After the educational strategy was implemented (Appendix 1), it was observed that 91.2% of the patients had a high level of knowledge about the risk factors for ischemic heart disease. When performing the Wilcoxon Signed Rank Test, it is shown that the increase in the level of information was statistically significant ($p \leq 0.005$) Rodríguez et at, in their study obtained similar results to the present study where they state that before the intervention there were no significant statistical differences between the study group and the control of their research, not after the intervention where knowledge increased considerably in the patients of the study group [13].

Regarding the distribution of older adults according to level of information in relation to the level of education before and after the implementation of the educational strategy (Table No. 2), it was observed that the predominant level of education in the study turned out to be the completed primary level, although it was observed that patients with a higher level of education were able to offer more adequate answers after completing the study, it was also observed that after applying the strategy, 102 patients, 89.47% of the total sample, offered correct answers. In their study on treatment adherence in hypertensive patients, stated that for each level of education below university, the probability of non-adherence to therapeutic treatment increased by 1.5 times [14]. They also noted that the experts in the interview explained the importance not only of the level of education or schooling but also of the patient's general culture as contributing conditions to achieving responsibility with health and consequently complying with medical indications. Although the result presented took place in a study on arterial hypertension, it should be noted that the results were very similar to those of the present study. In the distribution of older adults according to blood pressure control after the implementation of the educational strategy (Table No. 3), it can be observed how the proportion of older adults with controlled hypertension increased by 23 percentage points, a statistically significant figure ($p < 0.000$). The control of blood pressure figures was carried out taking into consideration the criteria established in the National Program for Prevention, Diagnosis, Evaluation and Control of Arterial Hypertension, which establishes that to consider a hypertensive patient as controlled, he or she needs to have at least four blood pressure readings recorded in his or her clinical history in the last 12 months, all with measurements below 140 and 90 mm of Hg [15].

Morales et al., in their study "Control of arterial hypertension in the province of Matanzas" conducted in 2011, when quantifying the control of arterial hypertension in the general population and relating some sociodemographic variables with the control of the entity, found that only 23.9% of hypertensive patients remained under control, with at least four medical check-ups performed [16]. Distribution of older adults according to total cholesterol levels after the strategy was applied (Table No. 4) 68.42% of the total sample reached desirable limits in total cholesterol levels and it was observed that 41 patients decreased serum TC

levels for 42% of the total sample, it was also observed that there was a significant decrease in high cholesterol levels with 33 percentage points, where only 12.28% of patients were above 6.23 mmol / L after the intervention, all this because a significant change in lifestyle was observed in the population given by the practice of systematic physical exercises and the incorporation of a healthier diet.

The study found that only a few countries have national population-based studies on the distribution and management of cholesterol levels, especially LDL-C and triglycerides (TGC), which are the lipid fractions used as therapeutic targets [17]. In the distribution of older adults according to Body Mass Index (Table 5), it was observed that after implementing the strategy, 67.54% of patients reached an adequate body weight, and 56 patients achieved positive changes in their body mass index. The number of obese patients was observed to decrease by 17.55 percentage points, which was significant. Proposed in an intervention study conducted on hypertensive patients that initially two-thirds of the patients had a BMI greater than 25, post-intervention less than half of the total patients maintained a BMI between 20 and 25, results that were not significant, which is not related to the results obtained in the present investigation [18].

The distribution of older adults according to sedentary lifestyle (Table No. 6) revealed that after the strategy was implemented, 80.7% of the patients performed some type of systematic physical activity, so an increase of 75 percentage points was observed in the number of non-sedentary patients. In an intervention study with a group of patients suffering from hypertension, stated that before the intervention, more than half of the patients included reported engaging in some form of regular physical activity [19]. This revealed a substantial change after the intervention, with 84.2% of the sample showing a regular tendency toward physical exercise, which is consistent with the present study.

The distribution of older adults according to smoking habits (Table 7) showed that before the educational strategy was implemented, 22% of the sample were smokers, which subsequently decreased by 13 percentage points, with non-smokers constituting 90.3% of the sample after the strategy was implemented. Found that only 5 hypertensive patients quit smoking after the intervention, with a reduction of 8 percentage points. This may be due to the fact that the strategy was implemented for only a six-month period [18].

## Conclusions

When assessing the population's level of information regarding the risk factors for ischemic heart disease, it was found to be low before implementing the proposed strategy. This corresponded to a predominance of low educational levels, which was the opposite of the strategy's implementation. The design of the educational strategy for the control of ischemic heart disease risk factors was based on a problematic situation contextualized to the study population. Based on this, specific actions and activities were developed to address the identified needs, all of which function in a coordinated and systemic manner. The validation of the educational actions by expert criteria offered the same criteria of applicability, feasibility, need for introduction, relevance, timeliness, and scientific level. The influence of the proposed educational strategy on the control of ischemic heart disease risk factors was highly significant, considering its successful construction as a response to the needs found in the population, to which a scientific theory was contributed in the development of the designed actions and activities.

## Conflict of Interest

The authors declare no conflicts of interest.

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## Annexes

**Annex 1**: Actions and activities for controlling risk factors for ischemic heart disease

**Action: 1**. Create a supportive relationship environment that fosters appropriate interactions between patients, families, and the Basic Health Team (BHT), in terms of dialogue, self-respect, respect for peers, flexibility, adaptability to the health situation, self-confidence, commitment and interest in medical care, self-control, empathy, acceptance and recognition of roles, and identification of disease entities.

**Activities:**

1. Advise the patient to speak slowly, avoiding conversations that may cause stress and dyspnea.
2. Educate the patient on the use of alternative forms of communication.
3. Conduct a discussion to instill in the patient the need to be responsible for self-care activities.
4. Explain to the family the importance of providing the patient with the necessary support, which would allow them to better understand and address their responsibility in managing their risk factors and diseases.
5. Conduct an educational discussion on the topic: Recognizing the role that the patient and family play in disease prevention and the risk factors for avoiding them.
6. Facilitate a space for discussion among older adults with risk factors for ischemic heart disease in the community, their families, and the elderly. This discussion will address: their interests, learning needs about the disease they suffer from, and adherence to treatment options.
7. Describe the minimum evaluation frequency based on each patient's characteristics and the illnesses they suffer from, and explain the importance of meeting this minimum frequency for managing underlying conditions and risk factors.
8. Create the Lyceums as a community organization for seniors that will provide informal support to the elderly in the area.
9. Provide appropriate guidance to seniors and their families regarding family and social situations that generate psychosocial stress.
10. Promote the active participation of the elderly in cultural activities and in the enjoyment and preservation of the community's cultural traditions.

**Action: 2.** Provide older adults with risk factors for ischemic heart disease with a theoretical framework appropriate to their abilities, enabling them to master essential terms related to the entity and its risk factors, as well as other entities that are also risk factors; with the goal of achieving an adequate understanding and a reflective approach that will allow them to incorporate their own criteria and effectively manage their risk factors.

**Activities:**

1. Lecture: "ischemic heart disease: Risk Factors, Symptoms, Treatment, Prevention of Complications, and Follow-up," using simple language that is easy for older adults to understand.
2. Educational talks for patients about the condition in question and its risk factors.
3. Group dynamics to exchange opinions, knowledge, and experiences, in order to change attitudes and misconceptions.
4. Demonstration exercises to help patients better understand the conditions and risk factors they present and how to combat or eradicate them.
5. Creation of banners and brochures with images and text promoting a healthy lifestyle.
6. Participatory technique: "The Flower of Concepts," where, after providing the necessary information, the patient can collectively construct or define a set of concepts, thus encouraging everyone's participation in developing their own concepts. This will allow them to more easily understand them and incorporate them into their language.
7. Participatory technique: “Obstacles to prevention,” with the objective of identifying problems, behaviors, situations, and circumstances that would be an obstacle to controlling their risk factors and managing them appropriately.

**Action: 3** Encourage community participation and the achievement of healthy lifestyles by promoting activities where patients feel responsible for self-care and implement measures to control the risk factors, they present related to physical exercise and the appropriate use of free time, also performing tasks that require creativity, cooperation and teamwork.

**Activities**:

1. Educational talk on the importance of physical exercise and its benefits for health, body weight control, stress, self-esteem, and disease management.
2. Screening of an audiovisual presentation: "Living 120," which explains the benefits of physical exercise and its effects on health.
3. Plan a program that includes time for rest and sleep, as well as time for physical activity with the individual.
4. Teach relaxation techniques and methods that promote sleep and rest.
5. Teach the type of clothing required for the climate and

the activities being performed, ensuring they do not pose additional health risks.
6. Demonstration exercise on how to ensure proper ventilation according to the season, allowing for safe activities.
7. Ensure that both the home and urban environment are as safe as possible and free of barriers to allow for safe physical activities that do not endanger the health and physical integrity of patients.
8. Group dynamics on the importance of creating community spaces that promote regular physical activity. (Spaces such as parks, esplanades, plazas, and open spaces that are safe for life)
9. Group dynamics aimed at increasing self-esteem, personal utility, and self-confidence to accomplish tasks by setting small goals that will allow them to achieve larger ones.
10. Demonstrative exercise on the benefits of group work, which may include physical exercises, role-playing, and participation in cultural activities.
11. Demonstrative exercise on the performance of breathing exercises and their frequency.
12. Demonstrative exercise on postures that promote breathing and chest expansion, as well as sufficient aeration.
13. Demonstrative relaxation exercise for breathing control.
14. Determine the patient's exercise needs.
15. Teach the patient how to walk safely.
16. Demonstrative exercise to demonstrate exercises that require less effort and that include relaxation, rest, and self-control techniques.
17. Participatory technique: "Dancing on the Clouds," in which the group will be divided into pairs, music of different rhythms appropriate for their age will be played for them to dance and sing, and the best performers will be rewarded with applause. This activity is an example of appropriate use and enjoyment of free time, demonstrating creativity, cooperation, and teamwork.
18. Encourage participation in senior citizen groups by carrying out activities tailored to each age group and the physical limitations of each senior.
19. Create a day center in the health area, which will allow, in conjunction with the polyclinic's physiotherapy department, to develop physical and psychological rehabilitation activities for seniors in the community and implement rehabilitation actions that will subsequently allow them to engage in regular physical activity appropriate to their abilities.

**Action: 4** Contribution to the resizing of lifestyle in the elderly with risk factors for ischemic heart disease, in terms of: guidance and understanding of the relationship between: the role of the elderly - self-reflection and diet - body weight.

**Activities:**
1. Give a lecture explaining the different food groups and their functions in simple language, with the goal of enabling them to incorporate them into their diet according to their individual needs, taking into account those that are most beneficial.
2. Conduct a health hearing on the benefits of maintaining a healthy body weight and the impact of overweight and obesity on health, daily life, and self-esteem.
3. Demonstrate through an educational talk the impact of obesity on certain conditions.
4. Instruct older adults with risk factors for ischemic heart disease on the importance of avoiding large meals.
5. Inquire about the patient's tastes and eating habits to adjust the diet to their preferences as much as possible.
6. Demonstrative exercise on the components of the diet to follow to ensure the child adheres to the concepts of a healthy diet and the number of fluids to consume. This exercise also shows the food groups to include and those to avoid, as well as the foods and liquids that promote elimination.
7. Group dynamics to exchange opinions, knowledge, and experiences on the topic of proper nutrition and eliminating junk food from the diet.
8. Encourage older adults to play a leading role in educating their children and grandchildren about proper dietary culture. This would foster self-confidence and self-esteem, and give them an important role in the family environment. This would positively contribute to raising their self-esteem and better achieving the goals set based on the aphorism: lead by example.
9. Participatory technique: "Fill your plate with three truths and a lie," in which older adults can reflect on the topic of nutrition and create a healthy menu according to their individual possibilities and needs.
10. Participatory technique: "Find your reason, find yourself: garlic, parsley, ginger, and pepper," in which patients can exchange experiences and criteria, present their problems, and propose solutions, allowing them to face obstacles with greater security and self-confidence.

**Action 5:** Development of measures to prevent and control tobacco addiction, which promote smoking cessation among the smoking population and at-risk groups, as well as counseling on the damage that this addiction causes to health.

**Activities:**
1. A health hearing on the essential elements of tobacco addiction, the pathways it begins, the mechanisms that sustain it, and how it can be broken.
2. An educational talk on the effects this addiction has on the body and on the individual and family economy, its relationship with diseases that are among the leading causes of death, such as: IHD, cancers, cerebrovascular diseases, high blood pressure, tuberculosis, COPD, and its relationship with other drugs, as it acts as a gateway drug.
3. Promote anti-smoking behaviors among nonsmokers and encourage smokers to seek medical help and attend smoking cessation consultations.
4. Encourage older adults to participate in anti-smoking education for children and adolescents within their families and communities. This will allow them to play a fundamental role in their education and give them an important role in the family environment, which will allow them to raise their self-esteem and better achieve the goals set based on the aphorism: lead by example.
5. Conduct a video discussion of a material on the topic.
6. Create a community group named: "Super Grandparents in the Fight Against Smoking."
7. Conduct a realistic self-assessment with smokers of their addiction and consumption patterns, and have them identify,

through reflective introspection, the external or internal stimuli that motivate them to smoke.
8. Discuss the irrational beliefs that sustain smoking behavior.
9. Conduct a lecture explaining what physical dependence is and the resources to cope with it.
10. Instruct smokers to gradually reduce their smoking habits by 10% daily. Teach them how to modify their smoking habits.
11. Instruct them to self-record automatic thoughts.
12. Monitor patients during withdrawal symptoms and prescribe pharmacological treatment, when necessary, as well as refer patients with complications that require it to other specialists.
13. Provide emotional support to the patient during the cessation process.
14. Explain relaxation techniques to prevent anxiety.
15. Apply MNT techniques and procedures to prevent stress and help control the addiction.
16. Facilitate self-reporting of withdrawal symptoms and make relevant individual recommendations.
17. Perform respiratory physiotherapy exercises.
18. Perform a dramatization of scenes depicting extreme situations for smokers and how to deal with them.
19. Analyze the benefits of quitting smoking.
20. Group dynamics on the topic: "Relapse: How to avoid it and how to cope with it."
21. Create extreme situations with imagination and concentration, creating the urge to smoke (role-playing).
22. Present a certificate of recognition at the final meeting to those patients who have quit smoking, which would serve as an encouragement to the patient.

**Action: 6** Interaction of the role of the older adult and the actions of the EBS, using the community as a space for exchange in the search for adequate control of underlying pathologies and risk factors.

**Activities:**
1. Assign family and older adults to the home for scheduled consultations and field visits, including the activities in which they should participate.
2. Explain the importance of adherence to medical treatment in the management of chronic non-communicable diseases such as hypertension and diabetes mellitus.
3. Conduct an educational talk on the importance of a low-sodium, low-fat diet to maintain adequate blood pressure control.
4. Designate the following as key topics for community activities to be addressed with older adults with risk factors for ischemic heart disease:

**From the biological level:**
- Ischemic heart disease and risk factors.
- Hypertension and risk factors.
- Diabetes mellitus and risk factors.
- Health-promoting behaviors.
- Healthy lifestyles.
- Warning signs of decompensation of underlying diseases.
- Ischemic heart disease and its relationship with associated conditions.
- Ischemic heart disease and age.
- Ischemic heart disease and diet.
- Ischemic heart disease and physical exercise.
- Natural course of the disease and therapeutic responses.

**From the psychological level:**
- How to avoid ischemic heart disease?
- Ischemic heart disease and personality.
- Ability, performance, and ischemic heart disease.
- From stress to ischemic heart disease.
- Affective responses to stress.
- Self-control and ischemic heart disease.
- The role of adulthood in this period of life.
- Achievement and life satisfaction.

**From the social level:**
- Relationship between older adults with risk factors for ischemic heart disease and their families.
- Socio-family actions for the biopsychosocial care of older adults with risk factors for ischemic heart disease in the community.
- Children and the elderly in society.
- Society, adulthood, and ischemic heart disease.
- Health Education and ischemic heart disease.

1. Teach the planned biopsychosocial topics in the spaces selected for this purpose.
2. Measure blood pressure in the spaces selected for the delivery of biopsychosocial activities, as a means of clinical monitoring and follow-up of older adults with risk factors for ischemic heart disease.
3. At the final meeting of the strategy, carry out the participatory technique: "The Tree of Achievements," with the aim of prompting participants to reflect on their achievements and positive qualities, analyze their self-image, and recognize their positive aspects as well as the level of their self-esteem.