Therapeutic Adherence in Ischemic Heart Disease: Future Perspective

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Chronic Noncommunicable Diseases (NCDs) are the leading cause of death in most Diseases (NCDs) represent the most important disease burden for industrialized countries and their prevalence is expected to increase by about 17% in the next 10 years. According to the World Health Organization, 35 million people died in 2017 as a result of ECNT, half of them before their 70th birthday [1].

Chronic Non-Communicable countries and their incidence is increasing rapidly among developing countries due to demographic transitions and changes in the population's lifestyle [1].

In Latin America in the last five years there were 800,000 deaths due to these disorders (25% of the total death) and in Canada and the United States the amount approached 60%. These disorders and their relationship with the risk factors that affect in their appearance they constitute the first cause of mortality in 31 of the 35 countries analyzed in the American continent [2].

The World Health Organization (WHO) has responded by assigning in its work program a higher priority to the prevention, control and monitoring of chronic non-communicable diseases (NCDs). Prevention carried out at the level of primary health care, supported by comprehensive programs for the entire population, is the most cost-effective method.

Ischemic Heart Disease (IC) is one of the most non-communicable chronic diseases in the world given by the relationship between cardiovascular risk factors and the onset of the disease.

The generic designation IC for a set of closely related disorders, where there is an imbalance between oxygen supply and substrates with cardiac demand. Ischemia is due to an obstruction of arterial irrigation to the heart muscle and causes, in addition to hypoxemia, a deficit of substrates necessary for the production of ATP and an abnormal accumulation of waste products of cellular metabolism [2].

Non-modifiable risk factors [3]. Are those where the doctor cannot change but if you take into account individuals at high risk for presenting such condition and such is the case that frequently present such risk factors:

- Age: The incidence of coronary heart disease increases progressively with age, so that the older the risk of ischemic heart disease.

- Gender: Men are more at risk of ischemic heart disease than women; the difference becomes more marked in pre-menopausal women compared to men of the same age.
- Inheritance: Hereditary factors.

Multiple are the modifiable risk factors [3], which allows health personnel to carry out prevention and control actions, including:

- Hypertension increases a person's risk of having coronary artery disorders, particularly as the person ages. Blood pressure is modified practically with the same measures as to lower blood cholesterol.
- Tobacco: Smokers have more than 50% risk of coronary heart disease than those who do not smoke. Smoking increases the levels of carbon monoxide in the blood, causing damage to the endothelium of blood vessels. Tobacco also increases the adhesiveness of circulating platelets. The abandonment of the smoking habit always improves the state of health.
- Diabetes Mellitus increases the risk of coronary heart disease, especially in women, because the disease increases the adhesion of platelets and increases the level of blood cholesterol. The approach is to control blood glucose levels, the evolution of ischemic heart disease can be improved. For some authors, Diabetes is a modifiable risk factor.
- Oral contraceptives are associated with a higher incidence of myocardial infarctions, especially in women smokers.

CIs can be grouped into four large groups or categories, which are [4]:

- Angina pectoris: Where the obstruction of arterial irrigation is not persistent enough to cause death of cardiac muscle tissue; there are three types that are stable angina, prinzmetal and unstable angina.
- Myocardial infarction: In this case the obstruction of arterial irrigation is durable or persistent enough to cause ischemic tissue necrosis of the myocardium.
- Chronic ischemic heart disease: They are patients who have generally suffered one or more heart attacks and have survived them, but continue to have heart problems because the part of the myocardium that was not infarcted, hypertrophy to meet the needs of the body and this to their It also causes an increase in cardiac demand due to the increase in size and structural components of cardiac cells (hypertrophy), bringing more problems because the heart cannot be adequately supplied due to coronary obstruction. These patients constitute 50% of those who receive heart transplants (Robbins and Cotran Structural and Functional Pathology 7th edition, Kumar, Abbas and Fausto).
- Sudden cardiac death: It is cardiac arrest in which symptoms occurred within an hour before death, or never occurred. Causes: coronary atherosclerosis, aortic stenosis, systemic hypertension, commonly lethal arrhythmias (asystolic and ventricular fibrillation) and Romano-Ward syndrome.

For the adequate management of the disease it is necessary that non-pharmacological and pharmacological measures be adopted for the control, in this way García Tejera [5] adopts the definition of therapeutic adherence as: the degree to which the behavior of a person - taking the medication, following a diet and implementing changes in the way of life- corresponds to the agreed recommendations of a healthcare provider. This definition is based, among other aspects, on the criterion that this provider does not have to be only the doctor, but any health professional, and the analysis that therapeutic adherence encompasses numerous health-related behaviors that go beyond taking by the patient, the prescribed pharmaceutical preparations. The definition of the word is avoided in this definition: instructions, which would imply that the patient only complies, and emphasizes that "the relationship between the patient and the healthcare provider must be an association that draws on the capabilities of each one.

In this way the difference between adherence and compliance is clear, a term also used in the scientific literature when referring to the follow-up of treatment by patients. The adherence demands the patient's compliance in relation to the recommendations participating jointly with health professionals in their own care in a responsible manner [6].

This definition recognizes as therapeutic behaviors, seeking medical attention, obtaining the prescribed medication, taking the medication properly, complying with follow-up consultations and executing the pertinent modifications, from personal hygiene to self-care, among others examples, which is why it is considered a complex process [7].

There are socioeconomic factors such as poverty, illiteracy, low educational level, unemployment, lack of effective social support networks, unstable living conditions, remoteness of the treatment center, high cost of transportation, high cost of medication, changing environmental situations, culture and popular beliefs about the disease and treatment and family dysfunction [8] which may influence poor therapeutic adherence., as well as factors related to the equipment or system of health care within those found.

Underdeveloped health services, poor drug distribution systems, lack of knowledge and training of health personnel in the control of chronic diseases, health care providers recharged from work, lack of incentives, short consultations, poor system capacity to educate to patients and provide follow-up, inability to establish community support and self-care capacity, lack of knowledge about adherence and effective interventions to improve it [9].

The severity of symptoms, the degree of disability (physical, psychological, social and vocational), the speed of progression and the severity of the disease and the availability of effective treatments [10] are some of the factors related to the disease.

Very useful is to determine the factors related to the patient [10] as resources, knowledge, attitudes, beliefs, perceptions and expectations of the patient. In addition, forgetting, psychosocial stress, anguish over possible adverse effects, low motivation, inadequate knowledge and ability to control the symptoms of the disease and treatment; not perceiving its need or its effect and misunderstanding the instructions, among other factors. Of special interest take these factors into account in the elderly patient.

It is important to design intervention strategies according to the explanatory models to counteract the barriers that patients encounter when facing their treatments. The interventions that provide the highest expectations are aimed at the patient, the provider or the health care system, which has shown good results.

The authors infer that effective care to treat chronic processes requires mobilizing the patient and the community that supports him. The best results show interventions that reinforce the patient's effort for self-care and adapt education to their needs and circumstances, provide access to resources and ensure continuity of care.

It is not an easy task. The concordance is presented as a therapeutic alliance, which corresponds to the model of the doctor-patient relationship of the participatory type proposed by bioethics, so that the patient's active participation in the treatment can be improved.

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