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The effect of chronic diseases on the heart muscle: Strategies to preserve human life from sudden death

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Abstract---From daily work and patient follow-up, we proceed in the search on field facts and modern sources that enhance the results and useful and great strategies that we reach in the research, where 930 patients were randomly collected (males and females) for a period of one year at Samawa General Hospital and the Specialized Center for Diabetes and Endocrinology in Iraq. The goal is to reduce deaths and injuries, and the effect of chronic diseases and their control, especially diabetes that destroys the body and its side effects, environmental pollution, wars and industrial food showed an increase in chronic and heart diseases and their complication, the development of a program and a treatment protocol from the beginning, receiving the patient and studying the files of former patients and autopsy corpses causes of death, , We adopted by reducing the impact of chronic diseases on heart diseases, the level of danger and the threat to the patient's life, the beginning of work, the control of chronic diseases, starting from psychological, nutritional and pharmacological behavior prematurely, and using the manual clamp method to measure the body's resistance to insulin and treatment of diabetic foot with water saturated with carbon dioxide in the form of 30-minute sessions and a method AC50 (the amount of food inside is less than burnt by sports and walking for diabetic patients) and periodic control of various heart diseases and atherosclerosis, their treatment and early diagnosis, and not exacerbation, and the division was made for patients from 45 years and less, patients from 45-65 years and 65 and over, in addition to Associated diseases and strokes, and reducing the emergency situations that the patient was exposed to, so the work was from good to excellent by reducing in general the diseases that kill the patient and the results as follows:

1) Patients before the age of 45 years who suffer from coronary artery (angina pectoris + MI) injuries were few, decreased by 4.2%, strokes were few, decreased by 2.3%, and chronic diseases decreased and became under control 42%, and comorbidities with COBD Allergies,

polycythemia, pressure, virus and bacterial infections, blood diseases, liver and kidneys decreased by 43%.

2) Patients from 45-65 who have coronary artery disease (angina pectoris + MI) had more injuries, the percentage decreased by 44.3%, while strokes decreased to 32%, chronic diseases decreased and were controlled by 66.1%, and associated diseases decreased by 23.6%.

3) Patients over 65 years old were more exposed to coronary diseases (angina pectoris + MI) decreased by 32.7%, strokes decreased by 30%, associated diseases decreased and were controlled by a percentage of 38%, and chronic diseases decreased and were under control by 34.2%.

4) The comparison between the educated and the uneducated who applied the health instructions and guidelines, the difference between them was by 36% in the decrease of chronic diseases, heart diseases and strokes.

5) The difference between poor and rich patients by 22% in terms of medical commitment and periodic examination and exposure to heart attacks, strokes and diseases related to living care, food and medicine.

6) The percentage of men who suffer from chronic and heart diseases and associated diseases is 17.3% more than women who suffer from chronic and heart diseases and associated diseases.

7) The proportion of patients dependent on insulin (mixed, mixed, and pure) the aggravation of chronic diseases, diabetic foot and heart diseases was more and more dangerous. Gradually, by follow-up and program, the percentage decreased to 33.5% and their condition stabilized and they followed the program by preserving their lives from the threat of sudden death

Keywords---periodic examination, program for chronic diseases, tests for diabetes, tests for the heart, risk factors, carbon dioxide treatment for diabetic foot, patients, manual clamp to measure the body's resistance to insulin, metabolism of sandrum, various heart diseases, Diagnostic and therapeutic cardiac catheterization operations, strategic work to reduce them (chronic + heart diseases), recovery period for the patient (Convalescent car).

Introduction

Hallmark A careful history is crucial to the process of determining whether pain is cardiac or not ,Patients presenting with symptoms that are consistent with an acute coronary syndrome require urgent evaluation because these conditions carry a high risk of avoidable complications,¹⁾ such as sudden death and myocardial infarction. Signs of hemodynamic compromise (hypotension, heart failure), ECG changes (ST elevation or depression), and biochemical markers of cardiac damage, such as elevated troponin I and T, are the most powerful indicators of short-term risk. A 12-lead ECG is mandatory and is the most useful method of initial triage. The release of biochemical markers such as creatinine kinase,²⁾ troponin and myoglobin .Therefore, one of the most important layers of the heart that is affected by blood nutrition Pericardium : It is a thin double or

double-layered membrane that represents the outer lining that surrounds and protects the heart like a sac, Myocardium : It is a thick muscular layer, and when it contracts, it creates pressure on the blood that is sufficient to push it out of the heart. Endocardium: It represents the delicate inner lining of the heart.³⁾ Coronary artery disease is the most common condition that leads to cardiac arrest. It can cause fatal arrhythmias in several places. A third of people who develop a myocardial infarction die before reaching hospital, and many die within an hour of acute symptoms onset.⁴⁾ Sudden cardiac death is usually caused by the development of catastrophic arrhythmias and accounts for 36% of deaths from cardiovascular disease.⁵⁾ Risk factors: Smoking, wrong dietary traditions, lack of movement and exercise,⁶⁾ obesity, age, gender, chronic diseases, and the psychological and living condition of the patient, have a negative impact on their lives. One of the most prominent chronic diseases is diabetes mellitus, which has a devastating effect on a person if he is of the first type (insulin-dependent) or the second type dependent on pills, in addition to high blood pressure, angina pectoris, excess fat, and heart disease⁷⁾ (angina pectoris), And the diseases that accompany diseases, especially the coronary arteries that supply the heart, and atherosclerosis, and the diseases that the patient suffers from, heart malformations, and the exacerbation of these diseases is reflected in the patient himself by neglect and lack of treatment, so it is a⁹⁾ chronic disease that causes dangerous side effects and damage to the heart, retina, nerves , ⁸⁾ diabetic foot, kidney ' which occurs sudden death, heart attacks and strokes, and also sometimes due to acute mechanical catastrophe such as heart rupture or aortic dissection and due to a group of arrhythmias associated with attacks and blood ischemia, so the heart muscle is affected by the emergence and elevation of enzymes ¹⁰⁾ The heart with blood plays a major role in diagnosing myocardial infarction as follows: (M I). They added to Echo-study the heart, tremors, Halter,(¹¹⁾ chest x-ray, cardiac catheterization, cardiography and knowing the type of angina pectoris that causes heart attacks that accompanies chronic diseases.

Table 1

N ^o	Enzyme	Hours	Day	MI Infraction
1.	CK-MB	4-6	2-6	
2.	Troponin I.T	4-6	7-10	
3.	Myoglobin	2-4	2-4	
4.	LDH ₁	12-24	7-12	
5.	AST	6-8	2-8	

Objective / purpose

Reducing deaths and the exacerbation of chronic and heart diseases that people suffer from by scheduling and setting a program to control and treat them using modern scientific methods and the studied results to develop a work protocol by finding innovative ways and new programs to reduce the death rate and the exacerbation of chronic and heart diseases.

Materials and Working Methods

With the increase in patients that we see from the patients' visits to the hospital and their many sufferings due to heart diseases and the extent of the impact of chronic diseases and their complications, we collected the number of patients 930 patients in the Samawa General Hospital and the Specialized Center for Diabetes and Endocrinology in Iraq - Samawa and patients' files and by direct contact with patients with them and randomly males and females we divided the patients into Before the age of 45 years and patients from 45-65 years and after 65 years for a period and for a period of 2021-2022 and pathological history Follow-up, comparison, treatment and periodic examinations and focus on the most dangerous patients for heart disease, one of the most important diseases of angina pectoris (Stable Angina¹²⁾ : classical , typical , Exertional , Effort , And Unstable angina : Crescendo , pre infarction , Variant angina (vasospastic Angina, Prinzmetal's Angina, Angina Inversa)⁽¹³⁾ Arrhythmia cases, or fibrillation of the atria or ventricles,) in addition to chronic diseases and accompanying diseases as we worked Equation:[periodic examination = chronic diseases + heart diseases + Recurrence status +Factor risk +complication +treatment]. And the extent of the response,⁽¹⁴⁾ we used immediate treatments for patients whose condition requires cardiac catheterization, heart surgery or surgical or internal clinical intervention, retina and retina, locating laser damage by the ophthalmologist, cataracts, and protecting patients from strokes that lead to lack of oxygen to death and sudden high blood pressure that causes Bleeding or blockage of blood vessels⁽¹⁵⁾ (blood clots), we received patients with medical history and made a complete file for follow-up and did all laboratory and radiological examinations, and we used various medicines⁽¹⁶⁾ (Medicines for diabetes and insulin, cardiac drugs, cardio protectors (Beta-Block, Calcium Channel Blocker, ACE, ARBs, Aspirin, Plavix 75 mg, Heparin, Isordil, Nitrates, Antispasmodic, and Symptomatic drugs) and severe cases of heart failure (Diuretics, Digoxin only heart failure , ACE), vit B12, ferrous sulfate (Fe⁺²), dietary⁽¹⁷⁾ guidelines, exercise, weight, avoidance of striatal risk factors, treatment of associated diseases, and avoidance of smoke environment pollution And fuels, harmful gases, remnants of war and its consequences on humans, and providing health and psychological care were all among our accounts, and to reduce the body's resistance to⁽¹⁸⁾ insulin, drugs (Omega 3, Vitamin C + D3 effervescent, Metabolism Syndrome , EC₅₀ inside the body, the food is less than the burnt one, and we used the manual clamp method to measure The extent of the body's resistance to insulin (diabetes mellitus) and treatment of all types of arrhythmia⁽¹⁹⁾ Heart failure, heart tests..Diabetes disease was at the forefront of diseases that exacerbated heart diseases, narrowed various blood vessels, kidneys and eyes, increased infection, bacterial and fungal infections, and viruses that increased the body's resistance to insulin secretion and worsened the patient's condition. Reducing and controlling blood sugar and carrying out analyzes and other examinations, and as part of the⁽²⁰⁾ treatments with carbon dioxide in the water, the diabetic foot is immersed in bags of water saturated with carbon dioxide for 30 minutes,⁽²¹⁾ and they are in the form of sessions for the patient and to another device placed in it that activates the blood circulation of the foot, so the work was organized The result is from good to excellent, with the help of modern⁽²²⁾ technologies, staff and fellow doctors at work.

Table 2
Unmet needs in diabetes management

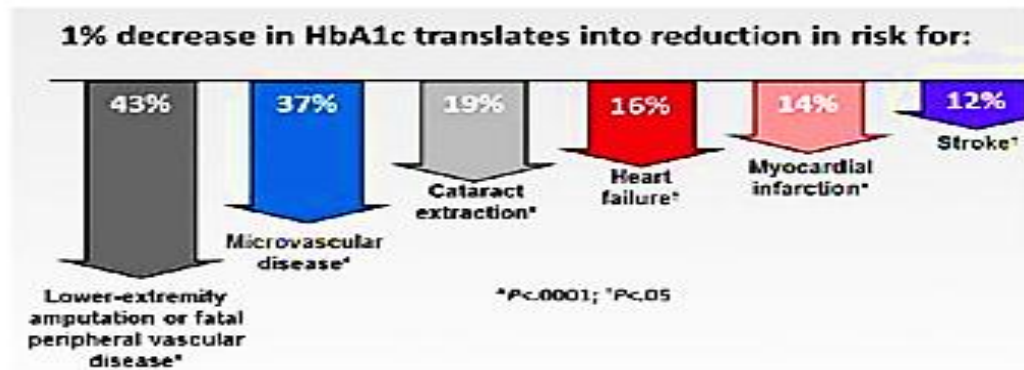


Table 3 (PCI)

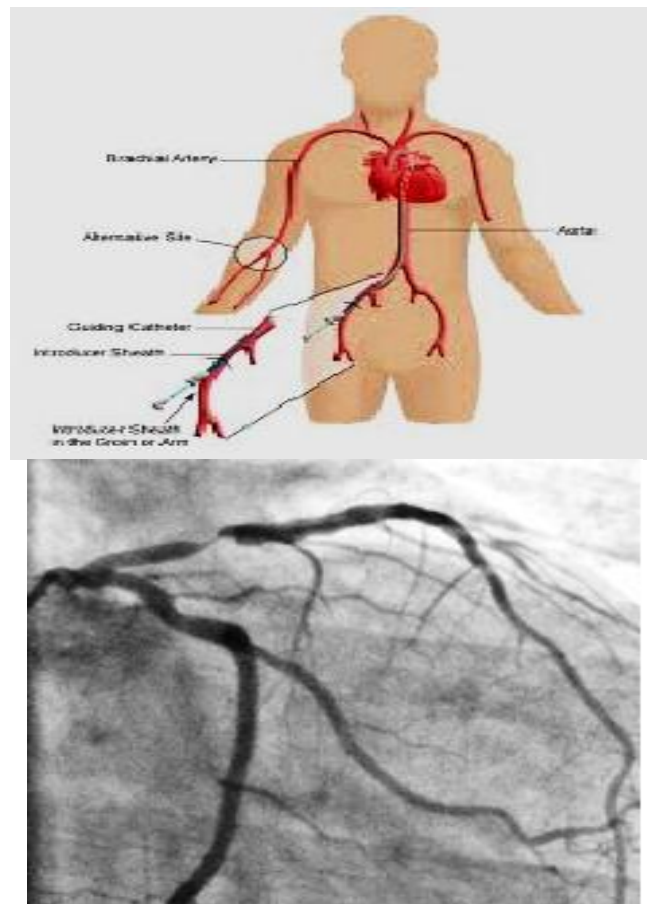


Table 4

Pictures showing diabetic foot treatment with carbon dioxide in the form of regular sessions Carbothera water + carbon dioxide device





Result

The results were clear through the comparison in the time and place specified for the work program in which we identified the sources of strength in treatment and weakness to reach what can be reached from our workplace and control of chronic diseases is of great importance and a distinctive reduction (for coronary artery disease) strokes or both, as in the report:

- Patients before the age of 45 who suffer from coronary artery disease (angina pectoris + MI) injuries were few, decreased by 4.2%, strokes were few, decreased by 2.3%, and chronic diseases decreased and became under control 42%. (COBD), allergy, polycythemia, pressure, virus and bacterial infections, blood diseases, liver and kidneys decreased by 43% .
- Patients from 45-65 who have coronary artery disease (angina pectoris + MI) had more injuries, the percentage decreased by 44.3%, while strokes decreased to 32%, chronic diseases decreased and were controlled by 66.1%, and associated diseases decreased by 23.6% .
- Patients over 65 years old were more exposed to coronary diseases (angina pectoris + MI) decreased by 32.7%, strokes decreased by 30%, associated diseases decreased and were controlled by a percentage of 38%, and chronic diseases decreased and were under control by 34.2% .
- The comparison between the educated and the uneducated who applied the health instructions and guidelines, the difference between them was by 36% in the decrease of chronic diseases, heart diseases and strokes .
- The difference between poor and rich patients by 22% in terms of medical commitment and periodic examination and exposure to heart attacks, strokes and diseases related to living care, food and medicine.
- The percentage of men who suffer from chronic and heart diseases and associated diseases is 17.3% more than women who suffer from chronic and heart diseases and associated diseases.

- The proportion of patients dependent on insulin (mixed, mixed, and pure) the aggravation of chronic diseases, diabetic foot and heart diseases was more and more dangerous. Gradually, by follow-up and program, the percentage decreased to 33.5% and their condition stabilized and they followed the program by preserving their lives from the threat of sudden death.

Discussion

The method of work was interconnected between clinical and academic work, practical life, and patients' complaints from the beginning of receiving the patient with all his sick cases in emergency and advisory cases. The basis of suffering is the increase in chronic diseases, especially diabetes, which leads to high mortality. This negatively affects heart, nerve, retina, kidney and diabetic foot diseases. On the patient, medical services play an important role to innovate and find methods and methods according to the possibility and effort to improve the psychological life of the community left by pathological events, wars, pollution of the environment, living life, industrial materials, instability, genetic diseases, material poverty, and communication networks (electromagnetic vibrations) where they took a lot of Ages of people We found a program and equation based on scientific references, international organizations, the American Food and Drug Administration PDF and the countries that were pioneers in the treatment and inventory of various chronic diseases with analysis, early examination and diagnosis and limiting their agreement, that culture and adherence to medical instructions first, was effective and guidance, periodic review and work Accumulation checks J, fat, kidney, liver, heart, echocardiogram, ultrasound, CT, resonance, chest rays. Various medicines, cardiac catheterization, surgery, cataracts, the most common for patients after 65 years who suffer from diabetes, chronic hypertension, myocardial infarction and other diseases. The work was successful in controlling chronic diseases and their lack of development, as well as heart diseases with their development and preserving the rest of the body's organs using a treatment protocol that includes: (adherence to the instructions and instructions related to exercise, food, periodic review, taking medication, medical follow-up, improving the patient's life Psychology, hospitalization period (convalescent car), physiotherapy, assisting the patient in recovery.

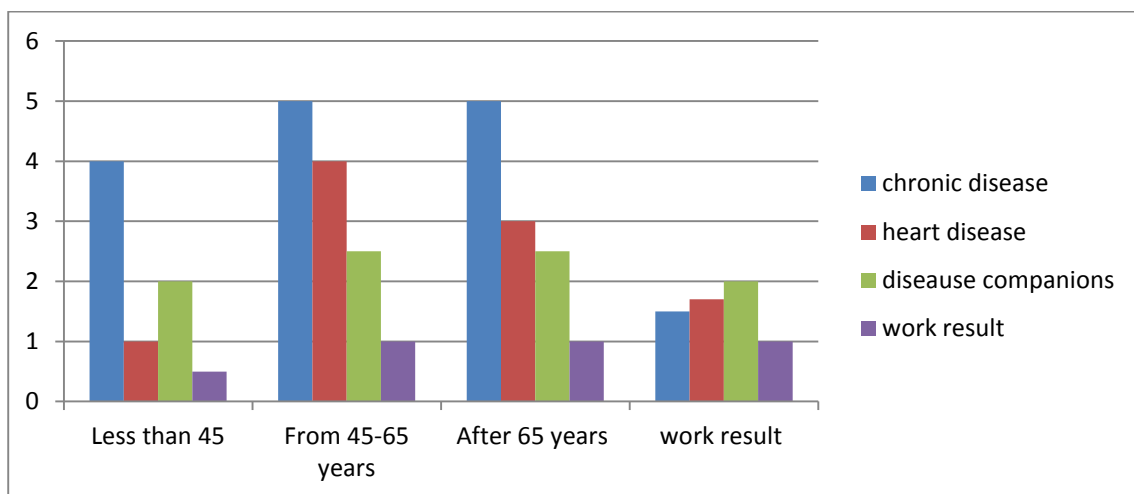
Conclusion

Patients who visit hospitals, who carry their suffering on the rise and cause a continuous increase in deaths, so the most important reasons were chronic diseases, especially diabetes, fatal heart diseases, accompanying diseases and strokes that threaten human life. From the autopsy and we discussed the real causes of the exacerbation of diseases, we started by educating and educating people, adjusting the psychology of patients, making a periodic examination and review schedule, studying cases of chronic diseases, heart diseases and accompanying diseases, a treatment protocol for medicines (Medicines for diabetes and insulin, cardiac drugs, cardio protectors (Beta-Block, Calcium Gunnel, Ace, Arbs, Aspirin, Plavix 75 mg, Heparin, Isordil, Nitrates, Antispasmoic, and Symptomatic drugs) and severe cases of heart failure (Diuretics, Digoxin only heart failure , ACE), vit B12, feroplax(Fe^{+2}),), using a

manual clamp to find out the body's resistance to insulin, treating diabetic foot with second sessions Carbon dioxide by immersing the foot in water loaded with carbon dioxide, we took into account the risk factors (high blood pressure, diabetes, obesity, family history of heart disease, smoker, age, gender, physical activity), we focused on the ages of 45 years and under randomly for patients, and patients from 45-65, and older than 65 years, with the treatment and control of chronic diseases, and the treatment of heart and rheumatic diseases With all its groups, accompanying diseases, and blood strokes Due to intensive treatment, physiotherapy, convalescence, results and information over the course of a year, the mortality rate for chronic diseases decreased by 36.4%, heart diseases by 42%, accompanying 52% and strokes by 38%, and men increased by 17.3% in injuries, and the ratio of educated to uneducated 36%, rich people and poor people 22%, the percentage of patients who depend on insulin (mixed, Lente , suloble (pure)) the exacerbation of chronic diseases, diabetic foot and heart diseases was more and poses more serious, gradually and by follow-up and program the percentage decreased to 33.5% and their condition stabilized and they followed the scientific program, and the percentage of them decreased Mortality, results are good and satisfactory 74.3%, and within the program to solve a societal problem and preserve the patient and society.

- Strategic: (1)
The treatment and follow-up program for chronic diseases and hyperglycemia is an independent risk factor for the development of both small and large vascular diseases. A criteria test has been developed to identify those who have a degree of hyperglycemia which, if untreated, is associated with a high risk of developing disease. Microvascular, especially diabetic retinopathy. Less severe hyperglycaemia is called 'impaired glucose tolerance'. But it is associated with atherosclerosis and myocardial infarction, which develops many diseases, economic consumption at cost, and a decrease in the level of middle ages, vision loss (eyes), kidney failure with an increase, lower extremity amputation rate, hospital family occupancy, overburdening the state with the national health budget. We worked to receive patients from The beginning and the continuous study of the non-development of chronic diseases, and the high rate of diabetes was 78%. It was determined by a program and treatment protocol, and it reduced and decreased injuries and their agreement, and the cost and health care by raising awareness of the most satisfactory results were at the level of the citizen in the city and the government.
- Strategic: (2)
Coronary artery disease is often the result of atherosclerosis and its complications, and the occurrence of angina pectoris of all kinds, which are chronic diseases that are mainly involved, especially heart and cerebral clots. Common clinical features and associations show that coronary arteries are involved in other disorders such as aortitis, arteritis, and other connective tissue disorders. Within the program were heart diseases, necessary examinations and immediate treatment by modifying therapeutic behavior, medications, and cardiac catheterization, so the development of diseases was clearly and remarkably avoided through integrated work. Coronary artery bypass grafting (CABG) .
- Strategic: (3)

The dimensions of the risk factors that surround the patient mainly contribute to reducing (morbidity and mortality): (Coronary heart disease, family history of heart disease, high cholesterol levels, smoking, high saturated fat diet, diabetes, Inactivation, hypertension, age, Atherosclerosis, stress, high salt diet. Obesity, Menopause. The dimensions of the risk factors that surround the patient mainly contribute to reducing (morbidity): Therefore, within the program with awareness, follow-up and prior knowledge of the disease and patient review, the greatest reduction of coronary heart diseases and prevention was achieved by 39%, and by continuing, the results would be more and better by placing the basic building block in prevention.



A graph showing the deterioration in chronic diseases, coronary heart diseases, comorbidities and the result of research work.

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