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Point of View

Non-Drug Treatment Today

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Abstract

The 20th century was characterized by great strides in medication treatment; however, its significance has not been lost and, in fact, has seen further development of non-drug treatment (NDT). Medical rehabilitation (MR) is based on NDT which includes exercise therapy, massage, physiotherapy, dietary therapy, health-resort treatment etc. This study discusses the advantages of the various types of NDT, including the possibilities of their application in the most common diseases. IJBM 2011; 1(3): 163-166.
Key words: *rehabilitation; therapy; health.*

During the 20th century, great progress has been made in the creation of new, effective and powerful drugs, which led to the formation of inflated expectations of drug therapy. Many physicians developed an illusion about the ease of diseases treating and rehabilitation of patient health by simply prescribing various drugs.

It would certainly be a great achievement if the problem of treating illnesses and restoration of health was solved by the mere intake of several tablets or a course of injections. Unfortunately, this is not true.

It is common knowledge that any drug therapy is a form of experimentation. The physician has a general idea of how the drug will act, but no one can predict in advance how this particular medication will affect a specific patient.

Irrespective of having (or not having) the desired effect, the doctor prescribes dose changes or adds one or more drugs, in trying to achieve clinical improvement. Assuming clinical improvement does occur; the question that arises is whether it has restored the patient's health and quality of his life.

For a physician, the main task is the diagnosis of the disease and its treatment, contributing to the elimination of the basic clinical manifestations (pain, cough, breath shortening, etc.), but what is the main task of the patient undergoing treatment?

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For most patients, the main task is the preservation of physical comfort, job, and therefore, material well-being; it could also mean the retention of marital status and the preservation of social status.

The new strategy, therefore, that can provide a solution for all these tasks is rehabilitation. The goal of the rehabilitation is to restore man as a person, that includes his physiological, physical, psychological and social functions [1].

Rehabilitation includes a complex of physical state and socio-economic events that assist sick and disabled persons to adapt to the restrictions which have arisen as a result of the illness or injury [2]. Vocational rehabilitation helps patients make decisions in response to questions connected with labor or work activities [3, 4].

Medical rehabilitation (MR) is a system of medical activities, aimed at the restoration of the functional reserves of the patient, compensation of disturbed functions, and improvement of the overall health and quality of life, as well as prevention of diseases through the application of mainly non-drug methods [5, 6].

The MR of a patient is an incredibly difficult task. It becomes vitally necessary to properly evaluate the functionality of each patient, to precisely identify each patient's optimal level of functionality that can be achieved and to develop and implement a program of activities to actually achieve this level of functionality.

The main NDT used in MR includes exercise therapy, massage, physiotherapy, dietary therapy and health-resort treatment. For most patients, psychotherapy also becomes essential, as it eliminates the fear of the disease and mentally prepares the patient to develop the

correct interaction with doctors and health staff. Great importance is also given to educational programs, providing the patients with the necessary information about the disease and its treatment and the correct organization of everyday life.

Some widespread NDT seriously lack evidence, although in some cases they have clearly proven their effectiveness [7, 8].

Some doctors significantly underestimate the value of exercise training in the preservation and restoration of health. While apparently simple, physical exercises are a serious and very effective method of treatment and prevention [7—15]. Each exercise separately and the whole complex of exercises together, in general, show a pathogenetic substantiation, aimed at the correction of the aberrations identified in a patient, based on his individual peculiarities. It therefore, becomes very important that patients following a course of inpatient or outpatient treatment continue to do therapeutic physical training, either in rehabilitation centers or at home.

Massage is a valuable means to restore the modified functions of the different organs and systems, as well as a positive influence on the whole body, increasing the protective and regulatory options [16-19].

Modern physiotherapy has the following number of advantages over other methods of treatment: universality of the actions (each factor can be used in the treatment of a variety of diseases); normalizing the nature of the action (restore homeostasis and harmonize the working of the organs and systems); absence of toxicity; lack of intolerance and allergisation of the organism (at least, intolerance of some factors of physiotherapy and allergic reactions to them encountered, albeit extremely rarely); ability to increase the therapeutic effect of other means and methods of therapy; good compatibility with other kinds of treatment; and a wide range of possible combinations of physiotherapy methods themselves [20].

The importance of health-resort treatment cannot be more highly advocated. It is not by accident that such resorts are the national property of all countries around the world. Different types of climates, sea bathing and therapeutic mud have been significantly used in treatment and rehabilitation throughout all historical epochs. The harmonious combination of well-organized treatment and rest is necessary in the strengthening and restoration of patient health [20-23].

Some doctors ignore basic questions such as when the patient had last eaten a meal or what he had eaten. However, a properly organized medical nutrition therapy (MNT) is an important form of treatment. MNT increases the efficiency of all medical interventions, stops or slows the progression of diseases, improves the state of health and quality of life of the patients and significantly reduces the need for medication [24-26]. Commonly, dietary foods are specially designed food products with specific chemical composition and energy value, physical properties and proven curative effect, suited to the relevant physiological needs and nature of disorders of the patient's metabolism.

In some cases when it is impossible to ensure adequate energy and plastic needs of the body naturally – patients are prescribed enteral tube feeding, in which food substances are administered orally in the form of liquids or through a tube [27]. When the normal oral method of feeding is quite impossible or when the patient, over a long time period, due to various circumstances, does not want to, cannot or should not eat normally then parenteral nutrition is the method of choice [28].

In developed countries, the past decade has seen a significant reduction in mortality from coronary heart disease (CHD). Cardiac rehabilitation (CR) is one of the important factors behind this decline [9, 10, 29, 30]. CR is based on an educational program for patients with CHD, physical training, dietary therapy (low-cholesterol diet, salt and carbohydrate restriction, the inclusion of a sufficient quantity of vegetables and fruits, seafood, and as very convincing results were obtained following the so-called Mediterranean diet, it is also included [31]), and finally, psychotherapy. The most important components of CR are smoking abstinence, reduction of excess weight and increase in physical activity. However, for certain patients with CHD, in the absence of contraindications, possible health-resort treatment (climatic resorts) is suggested.

CR is particularly beneficial for patients with arterial hypertension (AH), the commonest cardiovascular disease, and which is one of the major risk factors for CHD, stroke, chronic heart failure. Systematic physical training improved the condition and prognosis of patients with AH [32, 33].

The importance of CR for patients with metabolic syndrome [34] cannot be overstated. In the absence of treatment they face a very high risk of cardiovascular accidents and even death.

One serious problem encountered in modern medicine is the widespread occurrence of respiratory diseases, the foremost of them all being chronic obstructive pulmonary disease (COPD) and bronchial asthma (BA). Recently a system of pulmonary rehabilitation (PR) has been developed in the treatment of these diseases [12, 35, 36]. Educational programs provide the information required for patients with these diseases and their caregivers. An important component of PR is the abstinence of smoking. Proven effective physical training, breathing exercises, massage, climate therapy (forest, mountain or sea coast environments, and speleotherapy). There are wide possibilities in the treatment of patients with respiratory diseases, particularly the implementation of modern physiotherapy, beginning with inhalation therapy using nebulizers. Today, various respiratory equipment and machines for assisted, non-invasive ventilation [37] have become available for use in patient homes. Patients with respiratory failure now can receive home oxygen therapy [38]. Also important are the devices that create a hypoallergenic environment, such as cleaners, humidifiers and air ionizers.

The last decade has seen significant progress in MR neurological patients, particularly those with cerebral stroke [39]. Success was achieved by the early application of NDT. Right from the first weeks of the disease, patients should actively utilize physical exercises, massage, psychotherapy, biofeedback therapy [40], ergotherapy [41], and lessons with a speech therapist, followed up in the future with perspective physiotherapy and occupational therapy. Several patients reported significant improvement after robotic-assisted locomotion training [42-45].

The important role played by NDT in traumatology. The main task of MR patients after the injury is to recover the full restoration of muscle strength and range of motion

in the affected limbs. Recently, the methodology of clinical movement analysis that has emerged, allows an accurate assessment of the level of and extent of violations of the movements [45]. Coupled with the conventional methods of rehabilitation of trauma (exercise training, occupational therapy, massage, physiotherapy, manual therapy, balneotherapy, therapeutic mud), new methods like the biofeedback therapy based on biomechanical parameters [45, 46], functional electrical stimulation therapy [45, 47], and robotic-assisted locomotion training [43-45] etc., have been introduced.

What should the patient do to recover and restore his health? The most important thing is he should be willing to change. He would need to become physically active, to reconsider his attitudes in terms of a positive perception of the world, and to adopt the correct nutrition, etc.

To lead a healthy lifestyle it therefore becomes necessary to make lifestyle changes that include physical exercises, rational nutrition, the renunciation of harmful habits (smoking, alcohol, drugs), mastering the methods of psychological self-regulation, the ability to cope with stress, the regime of the day, etc.

What should a doctor do to help restore the patient to normal health? Complete and timely use of all possible medical, drug-free and, if necessary, surgical treatment, including helping the patient adopt new and healthier lifestyles.

Difficult? Certainly! But there appears to be no other option!

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