MEDICAL AND SOCIAL MODEL OF CHRONIC CARDIOVASCULAR SYSTEM DISEASE TREATMENT

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Summary. Chronic cardiovascular diseases (CVD) impose new challenges to the physician-patient relationship in modern society. The ageing of the population and the social deadaptation necessitate a medical and social model of treatment of the chronic CVD. In the cases of acute conditions, the physician dominates in the treatment process, removes the cause and prevents the consequences. In the cases of chronic conditions, the patient needs are mainly social and psychosocial and not so much medical ones. The chronic patient has got a certain potential of health and adaptation. It is the physician's task to prescribe the treatment, but at the same time to control such potential, to teach the patient how to live with the disease and to improve his or her quality of life. In their everyday life, people look for health, and not for medical care. In that aspect, a number of factors of the social-cultural-economic model have to be taken into account.

Key words: *acute coronary syndrome, urgent abdominal surgical diseases, perioperative cardiac complications of non-cardiac surgery*

A basic trend of morbidity nowadays is the increasing number of chronic diseases. That is due to a number of factors: therapeutic advance of medical science, diagnostic omissions, population ageing, etc [1].

In the recent years, chronic diseases mark high incidence among the population, due to which they represent one of the priority health policy issues in a number of countries. The needs related to such diseases are rather social and psychosocial than medical, they transform the personal life of the individuals.

Among the chronic diseases, there are such ones which due to their wide distribution and to the serious medical-social problems related thereto are called socially significant diseases. Such are:

– cardiovascular diseases (chronic ischemic disease, hypertensive disease, cerebrovascular disease);
– malignant tumors;
– diabetes mellitus, ulcer disease, obesity;
– alcohol abuse and toxicomanias;
– traumatism, etc.

A number of studies are dedicated to such diseases, aiming to establish both their distribution and the respective conditioning factors.

The unfavourable impact of diseases may not be fully characterized by description of the health status alone. The importance of quality of life (QL) evaluation increases in healthcare and it is more and more widely acknowledged as a valid and appropriate criterion for evaluation of medical treatment. The QL is first of all a subjective feeling and sense of well-being, including physical, psychological, social and mental aspects [2]. The increased interest in QL evaluation is mainly due to the modern healthcare requirements, trends and policy. The QL evaluation may help determine the healthcare priorities for optimal resource distribution and allocation for QL improvement. The clarification of the main reasons for QL deterioration and the therapeutic outcome evaluation are acceptable criteria for medical treatment evaluation and render useful information to determine the complex and useful treatment approach for patients, suffering from cardiovascular diseases [2].

It is known that 80% of the chronic diseases may be prevented. But besides the lifestyle changes, stopping smoking, healthy nutrition, maintaining of normal body weight, the persons at risk should as well control the risk with medicaments (hypertension, dislipidemia, etc.). While all medicaments from the developed countries are available and registered in this country, financial restrictions limit their application and influence the health status. On the other hand, the risk control has got direct economic effect in a long-term perspective, since inadequately treated chronic diseases will cause increase of expenditures in the developing countries during the coming years due to the need to treat the complications.

The cardiovascular diseases (CVD) are the main mortality factor both for this country and for other European countries. They represent important reason for population disability. They account for half of the deaths, the rate for our country being even higher.

The task of CVD control is realized through the implementation of national and international health programmes. According to WHO data for 2005 about mortality in Europe, unlike other countries, CVD mortality in Bulgaria increases and life expectancy decreases. In spite of these data, no change of attitude to chronic disease treatment is witnessed. Dr. R. Beaglehood (WHO) analyzed the global prevention strategy and raised point-blank the issue of patient access to medicaments for chronic

disease treatment. He underlined that chronic diseases are diseases of misery and poverty.

The establishment, treatment and control of arterial pressure are among the basic health priorities of all countries. The efforts to optimize anti-hypertension therapy are directed to individualization of the therapeutic approach with taking into account the age, gender, availability of accompanying diseases and respective intake of medicaments, improvement of patient susceptibility to anti-hypertension therapy and lowering of the overall cardiovascular risk. Epidemiologic studies reveal increased cardiovascular risk related to arterial hypertension, and a number of studies have proven that lowering of the higher arterial pressure (AP) decreases CVD morbidity and mortality rates. Observation studies have established that better pressure control is related to infarction and insult rate reduction.

Minnesota Heart Survey (MHS) data were published recently, analyzing risk factor and cardiovascular morbidity and mortality distribution in a US region with 2 million population. The report evaluates the population results for the period 1980 – 2002. They indicate better AP control with recorded significant reduction of insult rate. However, a considerable increase of the body mass index is witnessed among the population for the reviewed period. Similar studies exist for some European countries – Belgium, Denmark, Germany, France. Reduced consumption of salt, fats and animal foods is established, but the share of people with overweight and obesity has increased. AP increase is witnessed in the so-called normotonics, which corresponds to greater probability for development of hypertension in such population.

The results obtained from MHS as well as from other studies should make us evaluate the attitudes in Bulgaria, since in this country those suffering from hypertension are much more than the known ones, the AP control of those who are treated is unsatisfactory and we are on one of the first places in the world in cardiovascular and cerebrovascular mortality rates. In order to succeed in CVD risk control at population level, it is necessary for the national priorities to ensure a guarantee of optimal discovery, adequate treatment and provision of incentives for therapy in a long-term perspective for the purpose of AP maintenance below the desired target values for the respective patient.

On the other hand, the QL of the arterial hypertension (AH) patients may additionally deteriorate after inclusion of anti-hypertension therapy – nearly half of them feel worse, or do not feel improvement, and their family members predominantly believe that the state of the patients has deteriorated as a result of the therapy, which is expressed in decrease of the vigour, ambitions, sexual activity, higher irritability, irascibility, distraction and memory disturbances, deterioration of the marriage, social and professional realization [4].

Chronic heart failure (CHF) turned into one of the major medical and epidemiological problems of the western world [5]. Within five years of diagnostica-

tion, CHF is characterized by higher mortality rate as compared to most cancer types. Its distribution grows rapidly, which is due to the ageing of the European population. The ESC Congress, held in Stockholm, Sweden in September 2005 gave answer to the question about the efficiency of CHF treatment with beta-blocker, which influences CHF mortality and hospitalization rate. In spite of that, in many patients the symptomatic persists and the prognosis is poor. The problem is partially due to the difficulty of applying a combination of numerous medicaments. Many CHF patients do not tolerate multidrug combinations and complain of side effects and potentially dangerous drug interactions. On the other hand, not all patients receive such potentially life-saving therapy and a considerable number of the treated patients take their medicaments in a non-optimal dose. HF patients have social communication problems, deteriorated psycho-social adaptation, more frequent depression and for better control QL monitoring is recommended [6].

In ischemic heart disease (IHD), patients stenocardia has adverse effect on the QL and such patients should be involved in educational and rehabilitation programmes. The state of those who survived myocardial infarction (MI) is additionally aggravated in the presence of angina or dyspnoea with accompanying lung diseases, sleep disturbances [7].

The QL of MI survivor patients needing revascularization procedures is poorer, the revascularization procedures are associated with QL improvement [8].

In rhythm disorder (RD) patients, anti-arrhythmic therapy affects the physical status, causes limitation in the emotional sphere, sleep disturbances, as well as greater mental distress as compared to people without anti-arrhythmic agents. That is partially due to the side effects of anti-arrhythmic drugs. Radiofrequency ablation and implantation of permanent electric cardiostimulators represent alternative therapy having long-term favourable effect with view to RD control, ventricular function and QL [9].

Chronic CVDs represent a challenge both to the healthcare system and to the society, family and individual [1]. Changes occur in the tasks and priorities of healthcare, as well as in the healthcare professional – patient relationship concept. The traditional healthcare model in the case of acute conditions differs from the permanent care for chronic patients. In a social-medical aspect, chronic patient care is characterized with the following specificities [1]:

1. Preservation of the patient's personality.

2. Personal life adaptation and reorganization – "to live with and in spite of the ailment".

3. The priority task is not clinical treatment of the disease, but patient management, support in his/her efforts for re-socialization.

4. Increased role of the "patient-physician" and "nurse-patient" relationship due to the lasting for many years on end contact with the healthcare establishment.

One of the main goals of modern medicine is health promotion the basic aspects of which are related with health education – knowledge, convictions, motivation, development of healthy lifestyle skills. The advanced countries' experience shows that the complex health promotion programmes are the most effective in that respect. Each complex programme solves three tasks the keyword of which is "change":

1. Change of people (population): raising health culture and forming of healthy lifestyle.

2. Change of professionals (physicians, nurses, pedagogues, journalists, politicians, etc.): achievement of professional attitude more adequate to public health.

3. Change of the living environment: risk factor reduction and development of sanogenous factors.

A key factor for the success of any health promotion programme is the ensuring of professional partnership as concrete expression of the integrated approach. The integrated approach involves the individual characteristics of man and his living environment. Practice proves that the isolated efforts of the physician and the nurse are not efficient enough.

The evaluation of the treatment and prevention care efficiency for CVD patients should not be limited to the traditional criteria. The evaluation by the patient of the disease and treatment is more and more widely accepted as a basic component of scientific research and of healthcare. The efforts are directed to evaluation of those QL aspects and changes which the patient himself/herself believes to be important, related to the value system and perspectives [1, 3].

Representatives of many professions should coordinate their efforts within the framework of complex programmes – on the first place health professionals, pedagogues, social workers, psychologists, lawyers, journalists, politicians, etc. This is how the narrow medical approach to healthcare problem solution is overcome.

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