

2. DIABETES – CROATIAN MODEL

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The first steps in Croatian model organization started in 1972 when the law was accepted according to the diagnosis, and mandatory registration of diabetes mellitus in Croatia. Since then, the building cycle, which included the basic organization, first-phase collection of data, and the first-phase registry with the first epidemiological data collected. According this collected data, the second cycle started. Since 1985, almost ten cycles have been performed to the now a day network called "Croatian Model".

The basic cycles depends mostly on education performed for the physician in internal medicine. So, at the moment the Croatian Model consists of a Reference Centre for Diabetes which is located in Zagreb, four Regional Centres in: Osijek, Split, Rijeka and Zagreb, 21 county centres and 250 primary health care teams.

The basic principle of Croatian Model is continuous specialized education, which is performed from the specialized level to the primary health care units, continuously evaluated by unnecessary referrals of patients to the Referral Centre. If the patients are unnecessarily referred to the Referral Centre, from a certain county that usually means that additional education in this county is necessary. In professional work annual updating manual on management of diabetes, sharing activities in diagnosis and treatment of diabetics is issued. According to the manual, biennial general examination of diabetic patients together with early detection of diabetes complications should be performed. Almost exclusively, treatment of type 2 diabetic patients should be performed by the primary health care sector, with controls in special units according to the request of primary health care. However, treatment of type 1 diabetic patients is performed continuously by the specialized and primary health care sectors together.

Professional scientific education is performed regularly for specialists in internal medicine every second year as the Postgraduate Study in Diabetology, becoming international since 1981. Almost 250 participants have already finished the Postgraduate Study from all continents, except Australia. The education of primary health care teams was performed for about 25% of all primary health care teams of Croatia. Additional education for the nurses is performed two times a year. The education of diabetic patients is performed on regular basis during the visits, in groups, inside diabetic associations, as well as during the 5 days daily hospital. The problem of appropriate education and re-education of diabetic patients during the regular visits is still unsolved.

The prevalence of diabetes in Croatia is 2.35% and is still constant since 1995. According to the earlier performed mass-detection drives, it is expected that about 75% patients are undiagnosed in the general population compared with 100 already diagnosed diabetic patients. That should increase the full prevalence to about 4%. Fifty percent of diabetic patients are treated with basic principles of treatment (diabetic diet, education with self-

management, regular exercise). About 50% of diabetic patients are treated with basic principles of treatment together with oral hypoglycaemic agents. About 21% of all diabetic patients in Croatia are treated with insulin. These data reflect the strong educational activity in the Croatian Model.

Education, motivation, and skills of health professional as well as diabetic patients, is the critical process in Croatian Model. All together 2027 primary health care offices are registered in Croatia. So, the average number of diabetic patients per primary health care office is 58. Among them about 56 diabetic patients are type 2, while the remaining two to three patients have type 1 diabetes. Comparing the data between 1986 and 1998 for the Regional Centres in Croatia, it can be seen that number of overweight diabetic patients decreases, the number of patients with basic principles of treatment increases as well as the number of patients with treated with insulin, while the number of diabetic patients treated with oral hypoglycaemic agents are decreasing. Continuous quality development in diabetes health care is based on using the evidence based best results of care as a continuous process, accepting patients' experience, stimulating quality care development at local level, and responsibility for quality care development in primary health care diabetes team, as well as by regular performed blood glucose self-management. So, education and professional work are strongly interrelated what is extremely important for treatment of all patients with chronic non-communicable diseases. At the moment of diagnosis when the patients are without any symptom, education is important to motivate diabetic patient to start treatment in time, what is extremely important for secondary prevention of diabetic complications. Usually, patients are building their motivation in the late phases of disease when usually some late diabetes complications are already present, and when the possibility for treatment is scarce. So, if the patient can be educated in time, motivated on time, the treatment can be performed much more successfully, with significantly lower costs.

Recommended literature:

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