

The Fight Against CVD in a Region of the Russian Federation



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Cardiovascular diseases (CVD) remain the number 1 problem in the Russian Federation and the Republic of Tatarstan. Tatarstan is a semiautonomous republic within the Russian Federation with a population of 3,803,200 people [1]. It has a mixed agricultural and industrial economy and its per capita income places it in the upper third of the Russian Federation's regions [2]. CVDs are responsible for more than 50% of the total mortality in the Republic of Tatarstan, although the mortality rate has declined in recent years. In 2005 CVD was responsible for 63% of total mortality; in 2015 this fell to 51% (unpublished data) [3].

In 2013, a systematic clinical check-up (dispanserization) of the population was initiated and carried out to identify people with chronic noncommunicable diseases, including CVD, in all of Russia, including Tatarstan. These clinical assessments are aimed at the identification and correction of the major risk factors for CVD: elevated blood pressure, elevated blood cholesterol, elevated blood glucose levels, cigarette smoking, excessive alcohol consumption, unhealthy diet, physical inactivity, being overweight, and obesity. Dispanserization was a well-publicized all-Russian program with a newly dedicated specific budget. In the framework of this dispanserization program we carried out short courses for physicians and nurses working at polyclinics (outpatient practices) on how to implement regular cardiology clinical check-ups and distributed a Methodology Handbook, which had been developed and published by the Russian Federal Centre for Prophylactic Medicine. Each year people at age multiples of 3 become subject for check-ups (i.e., ages 18, 21, 24...102), with about 600,000 adults in the Republic of Tatarstan seen annually. The minimum cardiology examinations include blood pressure measurements, electrocardiography, total cholesterol level and blood sugar tests, and questionnaires on diet, smoking, physical activity, and alcohol consumption.

The dispanserization of the population of the Republic of Tatarstan in 2015 showed that CVDs remain the most common diseases. A total of 566,000 people were examined in 2015. Of the ~55,000 newly diagnosed chronic diseases, CVD amounted for 20.1% (11,205 of 55,746); of these, diseases associated with high blood pressure comprised 51.3% (5,738 of 11,205 cases) and coronary heart disease comprised 10.8% (1,210 of 11,205). The prevalence of cardiovascular risk factors was high also; 50% had lipid metabolism disorders, 25% were obese, and

39% smoked. The year 2016 is 3 years from the start of dispanserization campaign, and the first follow-up data will be collected and available for analysis [4].

Because of high cardiovascular mortality, 2015 was declared the year of the fight against CVDs in Russia. Because of the complex social, economic, and psychological drivers of CVD risk factors, we inaugurated an intensive program in community education through various media channels in our region [4]. The focus was on dominant cardiovascular risk factors: diet and sedentary lifestyle, and additionally and importantly, on recognizing and acting upon the first manifestations of acute cardiovascular conditions, including myocardial infarction and stroke. We created short videos (up to 1 min duration) for regular broadcasting on local television, showing clearly and artfully the important aspects of the problem. As part of this information campaign aimed at increasing health awareness 1,080 lectures were delivered at the ministries, governmental institutions, and industrial enterprises themselves to bring the health awareness program directly to the most vulnerable populations. Blood pressure measurement was carried out on more than 25,000 people in public places and, high blood pressure was found in 25.9% of individuals.

This systematic work in the Republic of Tatarstan has led to decrease in the total mortality in 2015 by 3.4% as compared to the year 2014 although the proportion of CVD deaths in total mortality in 2015 remains very high, at 51% [4].

MANAGEMENT OF ACUTE CORONARY SYNDROMES

We should separately describe the treatment of myocardial infarction. In 2007 Tatarstan inaugurated a system of providing round-the-clock medical care for patients with acute coronary syndrome, including emergency coronary angiography. Today in the Republic of Tatarstan (with 3.1 million adults), 7 round-the-clock medical centers deliver emergency care and 90% of the population has access to emergency medical care with coronary stenting within 2 h of the symptom onset. This led to a very significant reduction in hospital mortality after myocardial infarction. Overall mortality for both forms of myocardial infarction (with ST-segment elevation and without ST-segment elevation) decreased by 35% during this period, and for the most severe form of myocardial infarction, those with ST-segment elevation the decrease was the most

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