I. Structure of Health care in Bulgaria

The health care system is publicly financed via the National Health Insurance Fund, but there is a substantial private sector.

By end of 2012, the data of the National Center of Public Health and Analyse (NCPHA) in the Republic of Bulgaria shows that health care services were provided by 9 144 health institutions for primary outpatient care, of which 3 798 are medical institutions for primary care and 5 346 are medical institutions for primary dental care. The prevailing form of organisation of health care is individual practice.

The group practices are 5.72%, in contrast with European countries where the ratio shows a prevalence of group practices. By the way, in the past the so called “polyclinics” were a type of group practices. The overall availability of doctors for the population of the Republic of Bulgaria in primary outpatient care in 2011 was 6.8 general practitioners per 10 000 inhabitants, and the average number of patients for 1 general practitioner was 1508.

In 2012 specialist outpatient medical care in the country is provided by 4054 institutions, of which: 121 diagnostic-consultative centres, 575 medical centres, 149 group practices for specialised medical care, 3 050 individual practices of specialist doctors.

Specialist outpatient care in dental medicine is carried out by 49 dental care centres, 76 individual specialist practices in dental care and one group practice in dental medicine. The greatest number of newly established health institutions for specialised medical care has been witnessed in Sofia city and the regions of Plovdiv and Varna.

According to data from the National Statistics Institute and NCPHA by 31.12.2012 the hospital sector in the country includes 312 medical care institutions, out of which 226 are public ownership and 92 are privately owned, which constitutes a mixed public-private system of hospital care.
Thus the overall number of institutions providing hospital care is 339, while in 2011 they were 343 (incl. dispensaries). In 2012, the hospitals had 45,726 beds at their disposal. The availability of hospital beds for the population in 2012 was 62.79 per 10,000 people.

In the structure of public hospital care in 2012 there is a prevalence of multi-profile hospitals (114 or 36.54%), followed by specialised hospitals (73 or 23.39%). A specific share in the structure of hospitals is allocated to 12 state psychiatric hospitals (3.84%).

In Bulgaria 4.1% of the overall health expenditure are invested in public health care and prevention programs.

Reference:

NCPHA: http://ncphp.govbg/
II. Risk factor statistics

Bulgaria belongs to the high-risk countries of the EU. The mortality from cardiovascular diseases remains high compared to the average for the EU. Yet the indicator for premature mortality rate decreases. In 2012 it was 22.3% compared with 23.3% in 2011. Premature mortality in Bulgaria in 2012 was twice higher among men (29.8%), in comparison with women (14.2%).

Figure 1: Mortality due to coronary heart disease in 2011 per 100 000 inhabitants

Figure 2: Mortality due to cerebro-vascular diseases in 2011 per 100 000 inhabitants

Smoking

Smoking is one of the proven leading preventable causes of disease and mortality. In Bulgaria smoking causes 13.5% of all diseases and 12.4% of mortality instances. Over the last several years we have witnessed a reduction of its spread. During 1952 the smokers among Bulgarian citizens were 13.7%, whereas in 2007 there were 45.2%, but in 2008 they decreased to 38.8%, and in the beginning of 2012 smokers comprise 36%.
Alcohol consumption
The results of a NCPHA survey show that 23.2% of the population (39.5% of men and 7.3% of women) consume alcohol regularly; 13.8% (19.8% of men and 3.8% of women) consume hard drinks every day.

Unhealthy and unbalanced diet
The analysis of the diet model of the Bulgarian population indicates that some unfavourable tendencies and characteristics in the diet of the population, observed during the last years, are still maintained, namely:

- Low intake of milk and dairy products
- Increased consumption of red meats and meat products, which is linked to the higher intake of saturated fatty acids
- High consumption of additional fats remains the same
- Traditionally low consumption of fish
- High consumption of sugar through increased consumption of sweets and confectionery products and soft drinks
- Intake of fruit and vegetables below the recommended healthy levels
- Decreased consumption of fibre due to the increased consumption of refined, processed food products and low consumption of wholegrain foods and legumes.

Low physical activity
The low physical activity is one of the basic risk factors in the development of chronic non-contagious diseases. It accounts for 3.5% of the global causes of diseases in the European region of WHO (between 1.8% and 5.6% for the separate countries) and is the reason for 3.3%-11.2% of all mortality instances. For Bulgaria low physical activity accounts for 3.5% of the global causes of diseases and 7.7% of all mortality instances. The sedentary way of life is common for all age groups of the Bulgarian population.

Arterial hypertension (AH)
In Bulgaria, as per the data from the National Hypertension League there are about 2 million patients with high blood pressure. AH affects 42.8% of men and 39.7% of women in active age (between 24 and 65).

Diabetes mellitus
In Bulgaria the spread of diabetes reaches threatening scope and affects 8.3% of the population, the mortality rate being 23.3 per 100 000 inhabitants.

Reference:
BAD (Bulgarian Association Diabetes)
III & IV. Prevention actors and activities

Main actors:

1. Ministry of Healthcare
2. National Center of Public Health and Analyses
3. Bulgarian Medical Association
4. Bulgarian Society of Cardiology
5. Bulgarian Hypertension League
6. Bulgarian Lipid League
7. National Sport Academy

There are institutions for preventive cardiology and rehabilitation centres at all five Bulgarian Universities.

Activities are organized to fight against arterial hypertension during the World Heart Day. Every two years, national symposia are held, which are dedicated to prevention and rehabilitation of cardiovascular diseases (CVD).

A National Health Care Strategy has been worked out for the period 2014-2020, in which the fight against CVD takes a central place. There is a series of publications, entitled “For the patient” – dedicated for patients with CVD.


Bulgaria is participating in a number of international projects, including the WHO CINDI (Countrywide Integrated Noncommunicable Diseases Intervention) Programme, the ESC’s survey EUROASPIRE (European Action on Secondary Prevention through Intervention to Reduce Events) and others.
V. Cardiac rehabilitation

Cardiovascular rehabilitation has great traditions in Bulgaria, but, regrettably, it is not well disseminated at present due to insufficient financing.

Rehabilitation in the country is performed in three levels (stages):

**Stage 1 rehabilitation**: It is hospital based care. Patients who have undergone percutaneous coronary intervention (PCI) or cardiac surgery are included. For approximately 2 weeks they are treated by cardiologists and physiotherapists. This is performed either in the hospital, where the above mentioned procedures have taken place, or in specialised structures. Blood pressure, electrocardiography (ECG) and Left Ventricular Ejection Fraction (LVEF) are monitored. Physical capacity is evaluated by exercise tests. The capacity of this service is however limited and not all patients are included. Financing is done by the National Health Insurance Fund (NHIF), which pays the so called clinical pathways to the care providers.

**Stage 2 rehabilitation**: It is performed again in hospital based settings. Patients are referred (usually twice a year) by cardiologists in outpatient practices, who look after patients that had revascularization procedures, cardiac surgery or suffer of heart failure. These patients are included in so called “dispensary lists”. They have to be followed up in the practice 2 to 4 times a year and monitoring of blood pressure (BP), ECG, LVEF, compliance to treatment is done. Patients with not complicated arterial hypertension (AH) are monitored by general practitioners (GPs), being supervised by cardiologists, twice a year. NHIF finances stage 2 as well.

**Stage 3 rehabilitation**: It is planned to be organised as outpatient setting in special groups, but is not financed by NHIF. Some Non-Governmental Organizations (NGOs) develop such activities, especially in the field of programs for reduction of overweight.

Primary prevention is performed by GP’s and the Practices for Preventive Cardiology situated in the University hospitals.

According to data from EUROASPIRE only 20 % of the patients with Acute Coronary Syndrome in Bulgaria are directed to cardiovascular rehabilitation.

For the period 2011-2013, NHIF has paid the medical institutions providing services in cardiac surgery, an annual average of about 1.650 cardio surgery clinical pathways on the territory of the country, the average number of patients who have received treatment in the country is about 1.600.

From the patients, who have had heart surgery, an average of about 1.200 annually have undergone cardiac rehabilitation clinical pathway in the country. This is about 75% of the total number of patients who have had heart surgery in the country.
VI. The Future

Action plans for the future are mainly aimed at the education of patients to restrict the increasing prevalence of arterial hypertension, low physical activity, overweight especially among children and youngsters.

Serious problems are tobacco and alcohol addiction. The idea is to engage as many as possible governmental and non-governmental organisations in these activities as this will be beneficial for the whole society.


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