

Country report Bosnia and Herzegovina – December 2015



Report by:

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[Health care](#) | [Risk factors](#) | [Prevention methods](#) | [Prevention activities](#) | [Cardiac rehabilitation](#) | [Future](#)

Baseline information about Bosnia and Herzegovina (B&H)

Bosnia and Herzegovina is divided into two 'Entities': the **Federation of Bosnia and Herzegovina and the Republic of Srpska**, as well as the district of Brčko. In 1995, the General Framework Agreement for Peace in Bosnia and Herzegovina, which is known as the Dayton Agreement, ended the three and a half year war in Bosnia. This agreement also gave the responsibility for organising, financing and delivering health care to the two state entities and district Brcko. The health-care system is split into three levels: primary health care, secondary health care and tertiary care.

Bosnia and Herzegovina covers the territory of 51.197 km², and population is of 3.871.643 (2014). Gross Domestic Product (GDP) (nominal) per capita is 4.029 \$, and health care expenditure per capita is approx. 300 Euro.

Ia. Health care - Republic of Srpska

Structure

The Republic of Srpska has a population of about 1.3 million, and covers the territorial area of 24.857 km². Organisation and financing of the health care is under responsibility of the Republic of Srpska.

There are 53 public primary healthcare centres. Secondary healthcare services are provided by specialised practices, specialised centres, hospitals and institutes (dentistry, transfusiology, rehabilitation, forensic). Tertiary healthcare services, as highly specialised services, include the most complex methods and procedures within diagnostic, treatment and rehabilitation. There are 14 public hospitals (one university clinical centre, one university hospital, eight hospitals, two psychiatric hospitals and two rehabilitation hospitals).

Policy framework for improvement of health of the population in the Republic of Srpska consists of a number of planning documents based on Policy for Improvement of Health

of the Population until 2020 by carrying out control of non-communicable and communicable diseases and enhancing health security. There are 5 cardiologists per 100.000 inhabitants.

Finances

The constitution of the Republic of Srpska (1) defines right to health care as one of the fundamental human rights: everyone has a right to health care. The right to health care shall be guaranteed under conditions provided by the law. Children, pregnant women and elderly persons shall have the right to health care financed from public funds, while other persons shall enjoy this right only under conditions provided by the law.

The Health Insurance Fund of the Republic of Srpska administrates mandatory health insurance scheme, in accordance with the Law on Health Insurance. The Fund contracts services of both public and private providers. The Fund currently contracts with primary health care centres, hospitals, rehabilitation centres and pharmacy. There is no co-payment for medications, doctor visits, nutritional counseling and there are no private insurance schemes that provide additional services.

References (1):

- Official Gazette of the Republic of Srpska, No. 21/92,28/94, 8/96, 13/96, 15/96, 16/96, 21/96, 21/02, 26/02, 30/02, 31/03, 98/03
- Official Gazette of the Republic of Srpska, No. 92/12

Ib. Health care - Federation of B&H

Structure

The population of the Federation of Bosnia and Herzegovina is currently 2.328.359. The constitution guarantees free access to health care i.e. health care for all citizens. There are 10 Cantonal Public primary healthcare systems. Secondary healthcare services are provided through specialist on the level of Cantonal Hospitals. There are 10 Cantonal Hospital (public) and several smaller regional hospitals (public, but with very limited resources). Tertiary healthcare services are provided by three University Clinical Centers in the Federation of B&H (Sarajevo, Tuzla and Mostar). There are approx. 9 cardiologists per 100.000 inhabitants.

The Federal Health Insurance Fund provides health insurance on the solidarity basis for cardiovascular patients (Percutaneous Coronary Intervention [PCI], Coronary Artery Bypass Grafting [CABG], pacing, Implantable Cardioverter Defibrillator [ICD], etc.) in accordance with the Federal Ministry of Health. The overall goal of health care policy in the Federation of Bosnia and Herzegovina is to decrease CVD morbidity and mortality until 2020, and there are policy and planning documents that have been already established but also a number of them still have to be established in order to achieve that demanding goal.

Finances

The basic financing, in terms of CVD prevention, is going through Cantonal Health Care Funds, and on the Federal level, in terms of treatment and interventions in CVD patients through Federal Health Insurance Fund. The Cantonal Funds are mainly oriented and contracts services with public providers, but also some of the procedures are contracts with private providers (outpatient clinics, hospitals, etc). The Fund currently contracts

with Primary health care centres, Cantonal Hospitals, Clinical Centers and Rehabilitation Centres. It is important to say that in the Federation of B&H (and the same is in the Republic of Srpska) we have very limited financing resources i.e. health care expenditure in Bosnia and Herzegovina per capita is 300 Euro! There is no co-payment by patients and there are no private insurance schemes.

IIa. Risk factor statistics - Republic of Srpska

CVD Mortality

Diseases of the circulatory system are the most common cause of death in Republic of Srpska, causing almost 47% of all deaths 2014.

PCI resources

There are 2 PCI centres.

Main CVD risk factors

The Republic of Srpska population health survey (2011) encompassed the population aged 18 and above who resided in the Republic of Srpska at least one year. According to the survey, 28,7% of adult population smoke, one-fifth of the population is obese (21.6%), 61.2% has cholesterol blood levels (≥ 5 mmol), 57,2% has increased blood pressure and has shown that more than half of adult population exhibit a low level of physical activity (57,9%). Risk factors have not changed over the past two decades.

IIb. Risk factor statistics - Federation of B&H

CVD Mortality

Diseases of the circulatory system are the most common cause of death causing almost 53% of all deaths in 2013. Overall CVD mortality was 11,100 (2011), and mortality rate 578/100000 in 2011, and 545/100000 in 2014. This small, but for us significant decrease, is due to introducing PCI in Acute Coronary Syndrome (ACS) patients. It is important to underline that CVD sick leave is almost up to 60% of all absence from work, invalidity up to 47%, and out of the total health care cost 30-54% is due to CVD. Even here risk factors have not changed over past two decades.

PCI resources

In the Federation of Bosnia and Herzegovina we have a total of 4 PCI centres, three in the University Clinical Centres (Sarajevo, Tuzla and Mostar) and one in a private Cardiovascular Clinic (Tuzla).

Main CVD risk factors

The adjusted data from three Clinical Centres and 3 Cantonal Hospitals, counting population aged 18 and above showed very high CVD risk (2013). According to our data, 32,5% of adult population smoke, 24,5% of the population is obese, 57,5% has total cholesterol blood levels ≥ 5 mmol, and 54% has increased blood pressure. Physical inactivity is also an important risk factor and is approx. less than 25%. Our very important CVD risk factor is unemployment with a rate of about 31-40% percentage of the labour population. So, what to expect if he/she lost job in the age of 40 - 45 and has family, two children, without any income and with minimal chance of getting new job, it is almost "normal" that in such situation next step is acute coronary syndrome, or cerebrovascular insult i.e. stroke.

IIIa. Main actors and Prevention methods - Republic of Srpska

Health promotion is an area in which several institutions are involved. There is a national coordinator for cardiovascular disease prevention (CVD), responsible for CVD prevention at the national level since 1999. Ministry of Health Care and Social Welfare established the "National Committee for Prevention of CVD" from 2000 as a first national alliance for established and implementation National Programme of CVD Prevention. This is an advisory body which analyses and coordinates the activities of cardiovascular disease prevention.

Within its common framework and under the auspices of the Ministry of Health Care and Social Welfare Republic of Srpska, there are the:

- Institute of Public Health
- Health Care Found
- Foundation of Health and Heart
- Society of Cardiology Republic of Srpska
- Societies of Family Medicine, Neurology, Endocrinology
- Numerous public institutions, organisations, scientific and patients' societies.

In 2003, the Ministry of Health and Social Welfare started the development of the National Programme for Non-communicable Diseases (NCD) Prevention, which is still implemented as being one of the core activities at the Primary Health Care level.

An extensive survey coordinated by the Ministry of Health to obtain improved data on the prevalence of chronic diseases and lifestyles has been planned in order to allow for more appropriate input into the planning of health promotion over the following years. Unfortunately, due to the overall economic crisis and lack of resources in all public sectors this has not been performed yet.

Health promotion and education programmes are also implemented at the primary health care level by nurses and other health care professionals working in health care centres.

Partnership: strong coalitions are of vital importance to ensure a success in efforts to deal with CVD prevention. We organised translation and distribution of European Guidelines for Dyslipidaemiae 2011 and for [CVD Prevention in clinical practice 2012](#) in health care centres. We also produced National Guidelines for Hypertension and Hyperlipoproteinaemia.

IIIb. Main actors and Prevention methods - Federation of B&H

Main actors are the Federal Ministry of Health, the Federal Institute of Public Health, Cantonal Ministries of Health and professional Associations i.e. Association of Cardiologists in Bosnia and Herzegovina and other professionals Associations as well. Broad public awareness of CVD and promotion of healthy life style and programmes for screening of patients in high CVD risk is needed. We have a National coordinator for cardiovascular disease prevention (CVD) within the Association of Cardiologists in Bosnia and Herzegovina, who is also connected to the European Society of Cardiology. Within

the the Federal Ministry of Health we have a section for prevention of non-communicable diseases. The alliance of various health care professionals between professional associations should work together and in close coordination and our goal is to improve this cooperation.

We also have some barriers in all this activities as we were too focused on improving the quality of inpatients hospital care, having in mind that our duty is too treat acutely ill patients, that is why we have not paid enough attention in improving CVD prevention. The main reason was limited financial resources. Our economic and financial situation in the country was also a huge limitation. Nevertheless, our main goals are:

- Education in the community
- Education of health care professionals
- Identifications of risk and high-risk groups
- Interventions, population based trials
- National Registry of CVD

IVa. Main Prevention activities - Republic of Srpska

Activities at population level

Health promotion and education programmes are implemented at the national level through various campaigns, while high risk individuals are managed at the family doctors.

The signing of the European Heart Health Charter in Republic of Srpska/Bosnia and Herzegovina was organised by the Foundation of Health and Heart, the National Assembly of the Republic of Srpska, the Ministry of Health and Social Welfare of the Republic of Srpska, Society of Cardiology of the Republic of Srpska, in order to contribute the conduction of its goals and its implementation as a part of the program for prevention of cardiovascular disease (www.heartcharter.eu). The aims were to create the conditions for the realisation of the objectives, mobilising the signatories to support the implementation and securing political support for a healthier life style, research, education, education of professionals and for prevention campaigns.

Programmes that have been established since the 2000s in cooperation with WHO such as the Countrywide Integrated Non-communicable Disease Intervention (CINDI) Programme and the Healthy Schools project have become nationwide initiatives, although they operate at the level of local communities, cities and schools. In cooperation with the Ministry of health care, Health Care Found, Center for Medical Research and Development Health Care we started the Project: **"Little School of Health"** 2012 with the aim of primary prevention of cardiovascular risk factors at school children. It should contribute to the education of parents and children and to influence the control and reduction of risk factors. We have organised educational activity and treatment for school-aged children within the ten-day camp during the summer and winter holidays. Doctors, a teacher, a psychologist, a professor of physical education and a nutritionist worked in camp. During the children's stay in the camp, in addition to offering healthy meals and organising physical activities necessary for the treatment of obesity, lectures and workshops were organised for the children tailored to the age, aimed at promoting healthy eating (proper food choices, their combination, method of preparation, estimation of energy and nutritional value) and physical activity.

Activities at individual level: the Nationwide Programme on Primary Prevention of CVD

The Foundation of Health and Heart (FHH) in cooperation with the Ministry of Health Care, Health Care Found 2001 instituted the project 'Education of Doctors and Population in Prevention of CVD'. Also in cooperation with health institutions and networks of doctors and patients, the FHH organised professional lectures on 'Prevention of cardiovascular disease in health institutions for promotion of health prevention and treatment of patients'.

IVb. Main Prevention activities - Federation of B&H

Activities at population level

In the Federation of B&H there are several projects: screening of individuals who are in high CVD risk, we translated and issued all ESC Guidelines and among them the [ESC Guidelines on CVD Prevention in clinical practice](#), we introduced HeartScore Charts, we issued our own Guidelines for patients (Guideline for Arterial Hypertension, Guideline for Obesity, Guideline for Cessation of Smoking, and Guidelines - Count Your Cardiovascular Fatal Risk).

Through billboards and print media we promoted reducing risk factors, and we promoted the main conclusion of the [ESC Guidelines on CVD Prevention in clinical practice](#).

Activities at national level

At the moment we are in process of developing a broad CVD preventive programme which is the product of a cooperation of Federal Ministry of Health and Federal Institute for Public Health and professional Associations, with the main goal to improve and implement an overall system of cardiovascular prevention in Federation of B&H.

At school

The goal is to promote primary prevention of cardiovascular risk factors at school children. It should include education of parents and children and should control and reduce risk factors.

Va. Cardiac rehabilitation - Republic of Srpska

For whom

Patients groups involved in cardiac rehabilitation are patients after myocardial infarction and patients after various types of cardiac surgery and after PCI.

There are no strict age limits for inclusion into the existing programmes of cardiac rehabilitation; the referrals depend on the functional and rehabilitation potential assessment performed by the referring specialist.

By whom and how

Rehabilitation at the secondary and tertiary care level includes, above all, programmes of cardiovascular medical rehabilitation provided in hospitals, spas or special rehabilitation centres. Most of the patients after acute myocardial infarction (AMI), PCI and cardiac surgery are rehabilitated in spa "Vrucica" Teslic. We provide rehabilitation services since 1959 when the Special Hospital for the treatment, prevention and rehabilitation of cardiovascular and rheumatic diseases was established. Referral to early phase cardiac rehabilitation after the AMI and PCI /or cardiac surgery is high (up to 60% of patients after an AMI, PCI or cardiac surgery) and covered by the state Health Insurance funds for many years. There are no extra costs (even in the form of co-payment) for patients until now.

Cardiac rehab programs usually provide education and counseling services to help heart patients increase physical fitness, reduce cardiac symptoms, improve health and reduce the risk of future heart problems. The program is conducted for three weeks.

Vb. Cardiac rehabilitation – Federation of B&H

For whom

Patients groups involved in cardiac rehabilitation are patients after myocardial infarction and patients after various types of cardiac surgery and after PCI.

There are no strict age limits for inclusion into the existing programmes of cardiac rehabilitation; the referrals depend on the functional and rehabilitation potential assessment performed by the referring specialist.

By whom and how

Rehabilitation at the secondary and tertiary care level includes, above all, programmes of cardiovascular medical rehabilitation provided in hospitals, or special rehabilitation centres. Most of the patients after acute myocardial infarction (AMI), PCI and cardiac surgery are rehabilitated in "Fojnica" Reha Center. Referral to early phase cardiac rehabilitation after the AMI and PCI /or cardiac surgery is high (up to 60% of patients after an AMI, PCI or cardiac surgery) and covered by the Federal and Cantonal Health Insurance Funds.

Rehabilitation programs for CVD patients usually provide basic education and counseling services to help heart patients increase physical fitness, reduce cardiac symptoms, improve health and reduce the risk of future heart problems. For patients after acute events or PCI/CABG procedures rehabilitation program is adapted to the patients' overall medical status, specific patient conditions and it is tailored individually. These programmes usually last for three weeks.

VIa. The Future - Republic of Srpska

We aim to:

- Establish a NCD Action Plan 2015-2025, including 9 global targets and 25 indicators and developing a road map for CVD Prevention. This project proposal includes the quality assurance, control and improvement activities, mainly operated through the development and execution of the National Registry of Patients with CVD.
- Reduce the percentage of patients with elevated levels of blood pressure and cholesterol and increase the percentage of CVD patients in secondary prevention with risk factor values at target.
- Improve the access to cardiac rehabilitation and advise the general population regarding smoking cessation, healthy eating and increasing physical activity.

The main obstacles for more successful implementation of effective CVD prevention and rehabilitation care at the system level are: the general lack of financial resources and a lack of obvious commitment of health care providers for the need of a systematic approach for prevention.

VIb. The Future - Federation of B&H

We aim to:

- Establish a National Plan and Programme for CVD Prevention, including 9 global targets and 25 indicators and to develop a road map for CVD Prevention. This project proposal includes the quality assurance, control and improvement activities, mainly focused on establishing National Registry of CVD.
- Raise public awareness of CVD, through education, media, electronic media, printed media, web i.e. social networks, and to use resources of public services which is financed by taxes i.e with our money. So, their duty is to help us in increasing overall educational level of population. This is especially important in smoking cessation, healthy life style, healthy diet programmes, and increasing of physical activity.
- Start a Federal Programme of Screening and Identification individuals who are in high CVD risk.

We will work also in close cooperation with the European Society of Cardiology in terms of expertise, advice, guidelines and educational programmes. The most important limitations for more successful implementation of CVD prevention and rehabilitation care are: lack of financial resources and of broad public awareness of CVD burden. Therefore, our main goal remains to reduce the burden of cardiovascular diseases in our country!