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# PUBLIC HEALTH INTERVENTIONS IN MANAGEMENT OF CARDIOVASCULAR DISEASES IN THE FEDERATION OF BOSNIA AND HERZEGOVINA IN THE LIGHT OF WHO HEARTS STANDARDS AS A MODEL OF GOOD PRACTICE

*Aida Ramić-Čatak*

Institute for Public Health of the Federation of B&H
st. M.Tita 9, 71000 Sarajevo
Bosnia and Herzegovina
email: *a.ramic@zzjzfbih.ba*

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## Abstract

***Aim*:** The aim of this paper is to assess the current role and influence of the public health interventions involved in Cardiovascular disease (CVDs) management in the Federation of B&H, in line with international good practice. ***Introduction:*** CVDs remain the main public health challenge all over the globe, as a result of interactions among individual, metabolic, behavioural and environmental risk factors. ***Methods:*** assessment of recommendations defined in the WHO HEARTS technical package for CVDs management in PHC from 2016, in the light of results of the current public health interventions of CVDs management in the Federation of B&H. ***Results:*** WHO HEARTS is a technical package composed of strategic and operational measures aimed to reduce the number of premature deaths from CVDs. The paper assesses the latest public health interventions in the Federation of B&H involved in CVDs management and its review in line with six WHO HEARTS package elements such as: healthy lifestyle, evidence based treatment protocols, access to essential medicines and technology, risk-based management, team care, task-sharing and systems for monitoring. ***Conclusion:*** Major part of WHO HEARTS standards for CVDs management is partially implemented in the Federation of B&H. Current morbidity and mortality rates of CVDs represent the evidence for the need of a more active involvement of public health interventions in CVDs management in the Federation of B&H.

**Key words:** CVDs, Public Health, Federation of Bosnia and Herzegovina

## Introduction

Cardiovascular diseases (CVDs) remain a global public health challenge, as a result of interactions among genetics, individual behavioural risk factors,

metabolic disorders and environmental influence. Despite the traditionally well known risk factors, such as : hypertension as the main precursor to the development of CVDs, tobacco, alcohol, unhealthy diet, physical inactivity, diabetes, stress exposure, effective strategies for prevention and management of CVDs remain somehow still percepted more as a cost for the health system, instead as a long-term investment in the health of a population. (1, 2, 3)

According to the data of the World Health organization (WHO) 17,7 million people die each year due to CVDs which is estimated to represent 31% of all deaths worldwide. If current trends continue, the annual number of deaths from CVD will rise from 17.7 million in 2017 to 22.2 million by 2030. CVDs occur almost equally in men and women. Approximately, 80% of all CVDs deaths are due to heart attacks and strokes. Almost 75% of all CVDs deaths occurs in low-income and middle-income countries, while 50% of deaths caused by cardiovascular diseases occur in the WHO European Region. (4-6)

Each year CVDs cause 3.9 million deaths in Europe and over 1.8 million deaths in the European Union (EU). WHO reports show some progress in prevention and treatment which has led to decreases in the rates of mortal CVDs in many high-income countries but similar trends have not been seen in so many other countries. Death rates from both ischaemic heart disease (IHD) and stroke are generally higher in Central and Eastern Europe than in Northern, Southern and Western Europe. (6,7)

**Aim:** to analyze involvement and role of the current public health interventions aimed to improve CVDs management in the Federation of B&H, in line with good international practice, particularly the document of WHO HEARTS technical package for cardiovascular disease management in primary health care (PHC).

**Methodology**: Use of WHO recommendations as „best buys“ for efficient CVDs management, with particular emphasis to the WHO HEARTS technical package for cardiovascular disease management in primary health care (PHC) as a framework for evaluation of CVDs management in the Federation of B&H. Through the use of available data of regular statistical system, results of periodical surveys as well the recently enforced policy and strategy documents in the Federation of B&H, particularly in relation to involvement and comprehensiveness of the current public health interventions in CVDs management, an estimated level of implementation of six main WHO HEARTS elements is assessed: healthy life style, evidence-based treatment protocols, access to essential medicines and technology, risk-based management, team care and task-sharing and system for monitoring.

## Results

*WHO recommendations for CVDs management*

WHO considers CVDs as a global health challenge and the world's leaders committed themselves to ambitious reductions in premature CVDs deaths by the United Nations 2030 Agenda for Sustainable Development, the World Health Organization (WHO) Global Action Plan for the Prevention and Control of Noncommunicable Diseases (NCDs) 2013–2020 and the Political Declaration of the High-level Meeting of the United Nations General Assembly on NCDs. (8-10)

The World Health Organization (WHO) has recommended a package of essential NCD interventions (WHO-PEN), with protocols and tools for NCD management (including management of cardiovascular risk) in PHC.

This package includes clinical measurements, simple laboratory testing, CVDs risk assessment charts, blood pressure measurement devices for early detection and treatment. (11)

In 2016 WHO published The HEARTS technical package for cardiovascular diseases management in primary health care which represents a strategic and practical approach in reducing the number of premature deaths from CVDs. The aim is to improve clinical preventive services in primary health care by using highly effective, sustainable and proven interventions. It involves a public health approach to CVDs management through a simplified treatment with standard protocols for primary and secondary prevention and appropriate referral, using a core set of medicines and basic technology; and improved cascade of service delivery by task-sharing and robust clinical monitoring. Main elements of the WHO HEARTS package are: healthy life style, evidence-based treatment protocols, access to essential medicines and technology, risk-based management, team care and task-sharing and system for monitoring. (12)

## Role of Public Health in CVDs management

Public health interventions are aimed at influencing national policies and providing guidance and tools to support effective measures in CVDs prevention, treatment and monitoring at all levels, both health and health related sectors. (13,14)

Public Health as actually „Health of Public" approach is significant in CVDs as leading death causes are strongly associated with so many health inequalities. Many surveys all over the globe have confirmed that risk factors

such as smoking, physical inactivity and obesity are higher in lower socio-economic groups, as well the CVDs burden of morbidity and mortality. (15-17)

Public health strategies aimed to detect, prevent, and control CVDs can be effectively implemented to so many levels of changes in population. Actually, CVDs management through Public Health approach integrates activities on all three levels of prevention.

Primary prevention is aimed at reducing risk factors for a development of CVDs in a population, and to reducing CVDs duration and consequences. Public health interventions on this level are based on individual and multiple health riks, particularly behavioural risks such as smoking, harmful drinking, unhealthy diet and physical inactivity. Motivation for individual behavioral changes involves new knowledge and skills on how to improve health through a change of lifestyle, as an argument which shows why public health is not health cost, it is a long-term investment for the population to remain healthy. Recommended physical activity reduces riks of CVDs by 20-35%. Quitting smoking is linked to a 35% reduction of all causes of mortality among patients with CVDs. (18,19)

Secondary prevention is aimed at an early detection of CVDs in the pre-symptomatic phase with the treatment focus on reduction of further health consequences. Public health approach at this level is actually a significant part of health services through evidence based treatment protocols and it makes available access to preventive services in the health system.

The aim of public health approach is to eliminate inequality among population groups or individuals in use of health services.

Early diagnostics and approriate treatments for hypertension as main risk factors for CVDs are very effective and relatively inexpensive, but still not available to so many people all over the globe. Over 20% of the overall hypertension as a major risk for CVDs is linked with alcohol misuse. Every 1 mmol/L decrease in total cholesterol reduces a relative risk for CVDs mortality by 24,5%. Every 10 mmHg reduction in systolic blood preasure reduces the risks of of stroke for 27%, the risk of CHD for 20% and the risk of a heart failure for 28%. Over 100 CVDs deaths could be avoided per 1000 familiar hypercholesterolaemia patients who are treated optimally compared to the ones with no treatment. (20-22)

Tertiary prevention is aimed at reducing the incidence or recurrences of chronic diseases which cause incapacity among patients with symptomatic CVDs. Public health approach is involved in interventions mainly on system level to support CVDs quidelines implementation. (23)

Beside the above mentioned three levels of CVDs prevention, public health interventions are significant in other sectors aimed at improvement of housing, transport, employment, poverty, environmental risk factors and making changes in socio-economy, cultural and environmental policies that are important for the prevention and management of CVDs factors which affect the entire population and society.

*CVDs management in the Federation of B&H*

Similarly to other countries, the trends of increasing morbidity and mortality from cardiovascular diseases in the Federation B&H are caused by interaction of different behavioural, metabolic and socio-economic factors. Emerging trends in morbidity and mortality from cardiovascular diseases are one of the major public health challenges in the Federation of B&H. (24)

Formal statistical reports show that more than a half of the population in the Federation of B&H ( 53,1% ) is dying from CVDs. Recently performed surveys show high prevalence of CVDs leading risk factors in adult population in the Federation of B&H such as: tobacco and alcohol consumption, unhealthy nutrition, obesity and physical inactivity. (24-27)

As it is obvious that public health has an important role in influencing measures of prevention, treatment and monitoring of CVDs, the aim of this paper is to assess possible impact of the current public health interventions in the Federation of B&H, in line with the WHO HEARTS technical package for cardiovascular diseases management in primary health care (PHC).

Throuh the use of the available data, current public health interventions in the Federation of B&H will be assessed in the light of elements recommended by WHO HEARTS technical package: healthy life style, evidence-based treatment protocols, access to essential medicines and technology, risk-based management, team care and task-sharing and system for monitoring.

*WHO HEARTS element : Healthy life style*

WHO standards in this segment involves the access of population groups and individuals to counselling on tobacco cessation, diet, physical activity, alcohol use and self-care.

This segment of CVDs management is partially implemented in the Federation of B&H.

Results of recent surveys performed in the Federation of B&H show a high prevalence of all main CVDs risk factors. According to results of the Study of the Health status of adult population in the Federation of B&H 2012, daily

tobacco consumption is confirmed by 44,1% of adults out which 56,3 males and 31,6 females. According to the results of the same Study, exposure to passive smoking in the home is confirmed by more than half of the population in the FB&H (54.1%), out which almost a half (44.4%) stated exposure to tobacco smoke by other smokers at the workplace, and over a half (52.7%) confirmed the exposure to tobacco smoke by other smokers in public places.(26)

According to the results of the Global Youth Tobacco Survey in School Children (GYTS) performed in 2013 in the Federation of B&H, daily consumption of cigarettes is confirmed by 12.7% of school children aged 13-15, 15.5% of which are boys and 9.7% are girls.(27)

According to the results of the Study of the Health Status of the adult population in the Federation of B&H 2012, alcohol consumption represents a significant public health problem for adults. Over a quarter of respondents in the FB&H (28.8%) confirmed that they had consumed some of the alcoholic beverages over the past 12 months, almost a half of which were men (46.1%), with the highest rate (54.3%) of men aged 25-34 and the lowest (30.0%) of people of 65 years of age and more. Alcohol consumption accounts for 11.0% of women, with the highest rate (20.5%) of women aged 18-24 and the lowest (5.0%) of women aged 55-64 years.(26 )

Through results of the same Study, almost one quarter of adult population in the Federation of B&H (21,2%) is obese out of which 19,1% are males and 23,3% females. Only one quarter of the population is physically active (24,6%) out which 28,7% males and 20,3% females. (26)

According to the Health Law, the family medicine team within the PHC provides continuous and comprehensive health care that is oriented to the prevention and control of health factors and the early detection of disorders and diseases.

There are periodical health promotion interventions directed towards the whole population, aimed to increase their knowledge and change their attitude and behaviour related to CVDs and health risk factors. Major part of health promoting actions in CVDs prevention are performed by the Institutes for Public Health in the Federation of B&H, in cooperation with NGOs, and are mainly related to marking internationally significant dates, publishing thematic promotional materials and co-operating with the media. (24)

*WHO HEARTS element : Evidence-based treatment protocols*

WHO standards in this segment involve simple, standardised algorithms for clinical care.

This segment of CVDs management is significantly implemented in the Federation of B&H.

With the aim to harmonize preventive, diagnostic and therapeutic services for the prevention and control of CVDs, in partnership between the Swiss Agency for Development and Cooperation (SDC) and the World Health Organization (WHO) in the period 2013 – 2017, the Project "Strengthening and improving modern and sustainable public health strategies, capacities and services for improving the health of the population in Bosnia and Herzegovina" was started. Within this Project Initiative, during 2017, by the Public Health Institute of the Federation of B&H, in cooperation with the Federal Ministry of Health and representatives of the Association of cardiologists of Bosnia and Herzegovina, guidelines for the control of CVDs have been published. (28)

The Public Health Institute of the Federation of B&H, in cooperation with the Federal Ministry of Health published the following guidelines for the control of CVDs: hypertension, diabetes and dyslipidemia, based on the European Guide for the prevention of cardiovascular diseases in clinical practice (version 2012) developed by the European Association for Cardiovascular Prevention and Rehabilitation (EACPR). (28)

The guidelines are based on the SCORE principle of examining the 10-year risk of CVDs based on the assessment of health status based on the value of multiple risk factors (age, sex, smoking status, systolic blood pressure, total cholesterol). The use of these SCORE estimates is recommended to people without symptoms of CVDs, especially to men over 40 years of age and women over 50, or if they are in postmenopausal age, and in people with established CVDs for the purpose of assessing the risk factors and confirmation of the chosen therapy.

Also, in accordance with the recommendations from the relevant WHO and CDC documents, guidelines for family medicine teams were made, containing an algorithm of recommended promotional preventive interventions at the level of Primary Health Care (PHC) related to leading risk factors such as: malnutrition, obesity in children and adults, physical inactivity and quitting and smoking cessation. (28)

*WHO HEARTS element : Access to essential medicines and technology*

WHO standards in this segment involve access to the core set of affordable medicines and basic technology.

This segment of CVDs management is partially implemented in the Federation of B&H.

There are inequalities in the access to the core list of essential medicines for CVDs between ten cantons in the Federation of B&H, as well in the access to health services in urban and rural areas, due to location of health facilities and shortage and disbalance of health professionals.

The health workers coverage in Federation B&H is low in comparison with the European region. According to health statistic data of the Institute for Public Health of the Federation of B&H in 2016, there were total of 26.543 employees in health sector in the Federation of B&H (rate 1.203/100.000), out of which more than one quarter of all medical doctors (28,3%) were 55 years of age and more, with over one fifth of 45-54 years of age (22,5%). Among medical specialists in 2016 there was one third (37,2%) of 55 years of age and more, particularly in PHC. In comparison to previous years, there is an unfavorable age structure of family medicine specialists, of which there was over one third (33,8%) of 55 years of age and more in 2016, with close to one half of 45-54 years of age (44,5%). (24)

The systematic activities of education of health workers, especially at the level of Primary Health Care (PHC), are regulated by the Law on Health Care and the Regulations on Specialties for Health Workers, done by the Federal Ministry of Health. According to the Law, the family medicine team within the PHC provides continuous and comprehensive health care that is oriented to the prevention and control of health factors and the early detection of disorders and diseases. Within the specialization of family medicine and continual education for work in the team of family medicine, by the Federal Ministry of Health in cooperation with the Public Health Institute of the Federation of B&H, education of doctors of medicine and nurses / technicians for CVDs management is carried out. Accreditation standards for health centers have been introduced by the Federal Agency for quality and accreditation (AKAZ) particularly through Policy on smoking ban in the National Health Service and family medicine teams (Chapter 3 - health promotion and disease prevention).(29,30)

*WHO HEARTS element : Risk-based management*

WHO standards show that this segment involves total cardiovascular risk assessment, treatment and referral.

This segment of CVDs management is significantly implemented in the Federation of B&H.

As a part of the above mentioned Project Initiative "Strengthening and improving modern and sustainable public health strategies, capacities and services for improving the health of the population in Bosnia and Herzegovina" in partnership between the Swiss Agency for Development and Cooperation (SDC) and the World Health Organization (WHO) in the period 2013 – 2017, the Public Health Institute of the Federation of B&H, in cooperation with the Federal Ministry of Health and representatives of the Association of cardiologists of Bosnia and Herzegovina, published guidelines for the CVDs management in PHC/family medicine teams.(28)

Main goal of these guidelines was increasing an early detection of people with undiagnosed or undetected cardiovascular disease risk factors or risk conditions such as smoking, obesity, diabetes, pre-diabetes, raised cholesterol, raised blood pressure, driving of effective interventions for people to reduce their risk of cardiovascular diseases and improving the care and management of people with established cardiovascular diseases.

The guidelines are based on the SCORE principle of examining the 10-year risk of CVDs based on the assessment of health status based on the value of multiple risk factors (age, sex, smoking status, systolic blood pressure, total cholesterol). The use of these SCORE estimates is recommended to people without symptoms of CVDs, especially to men over 40 years of age and women over 50 years, or if they are in postmenopausal age, and in people with established CVDS for the purpose of assessing the risk factors and confirming the validity of the chosen therapy. Also, in accordance with the recommendations from the relevant WHO and CDC documents, guidelines for family medicine teams were made, containing an algorithm of recommended promotional preventive interventions at the level of Primary Health Care (PHC) related to leading risk factors such as: malnutrition, obesity in children and adults, physical inactivity and quitting and smoking cessation. (28)

*WHO HEARTS element : Team care and task-sharing*

According to WHO standards, this segment involves decentralized, community-based and patient-centred care.

This segment of CVDs management is partially implemented in the Federation of B&H.

Generally, human resource management in the health sector is still significantly challenging, through a shortage of physicians, particularly specialists, in PHC, internal medicine, surgery, paediatrics and all public health disciplines, with substantial teritorial, gender and age disbalance of health

professionals. A lack of health professionals in rural areas is evident, in most disciplines there are three quater female health profesionals, a complete lack of physicians under the age of 34 and over 50% of physicians in the age group over 55, additionally challenged with an increasing migration trends of health professionals to the EU labour market. These facts are strong evidence for the need of a systematic approach in human resource development in health sector in the Federation of B&H. (24)

*WHO HEARTS element : System of monitoring*

According to WHO standards, this segment involves patient data collection and program evaluation.

This segment of CVDs management is partially implemented in the Federation of B&H.

Main challenge for CVDs monitoring is still the absence of a single registry for CVDs in B&H or at the entity level. To improve CVDs monitoring in the Federation of B&H, during 2017, by the Public Health Institute of the Federation of B&H in cooperation with the Federal Ministry of Health, the report forms of the regular health statistical system have been revised, which will enable a more detailed monitoring of morbidity and mortality of CVDs. Instead of the current tracking of CVDs trends according to the chapters of the 10th ICD Revision, it will be possible to monitor the trends of CVDs by individual types of illness.(28)

Also, in accordance with its legally defined functions, the Public Health Institute of the Federation of B&H, in cooperation with relevant international organizations (WHO, CDC, UNICEF) regularly performs periodic population surveys in which trends of frequency of individual risk factors for CVDs are monitored, and the assessment of using preventive health care is made. Some of the more relevant surveys performed by Institute for Public Health of the Federation of B&H were: Multiple Indicator Cluster Survey (MICS) (2002, 2006, 2012), Study of the health status of the population of the Federation of B&H, (2012), Global Youth Tobacco Survey (2003, 2008, 2013), Baseline research of risk factors for NCD (2015). (24-27)

## Discussion

Public health interventions in the Federation of B&H were assesed in line with the WHO HEARTS technical package for CVDs management in PHC and through six main elements: healthy life style, evidence-based treatment

protocols, access to essential medicines and technology, risk-based management, team care and task-sharing and system for monitoring.

Analysis shows that major part of public health interventions in the light of WHO HEARTS package is partially implemented in the Federation of B&H.

Healthy life style which involves the access of population groups and individuals to counselling on tobacco cessation, diet, physical activity, alcohol use and self-care is partially implemented in the Federation of B&H. The family medicine team within the PHC provides preventive health services towards main CVDs risk factors, with disbalance of teritorial access, location of health services and a shortage of health professionals in PHC.

Results of recent surveys performed in the Federation of B&H show a high prevalence of all main CVDs risk factors, such as daily tobacco consumption by 44,1% of adults, alcohol 28,8%, over one fifth of adult population (21,2%) is obese and only 24,6% of adult population is physically active.

Periodical health promotion interventions directed towards the whole population, are not covered by systematic approach and are without continual financing mechanisms. (24-27)

Evidence-based treatment protocols which involve simple, stadardized algorithms for CVDs are significantly implemented in the Federation of B&H. Guidelines for the control of CVDs for hypertension, diabetes and dyslipidemia, have been published, based on the European Guide for the prevention of cardiovascular diseases in clinical practice (version 2012) developed by the European Association for Cardiovascular Prevention and Rehabilitation (EACPR). (28)

Access to essential medicines and technology which involves access to the core set of affordable medicines and basic technology in CVDs is partially implemented in the Federation of B&H, due to the inequality in access to the core list of essential medicine for CVDs among the cantons in the Federation of B&H as well in access to health services in urban and rural areas, due to location of health facilities and shortage and disbalance of health professionals. (24)

Risk-based management which involves total cardiovascular risk assessment, treatment and referral is significantly implemented in the Federation of B&H due to the published guidelines for the CVDs control based on the SCORE principle of examining the 10-year risk of CVDs based on the assessment of health status based on the value of multiple risk factors (age, sex, smoking status, systolic blood pressure, total cholesterol). (28)

Team care and task-sharing which involves a decentralized, community-based and patient-centred care is partially implemented in the Federation of B&H due to a shortage of physicians particularly in PHC and in all public health disciplines, with substantial teritorial, gender and age disbalance of health professionals. (24)

System for CVDs monitoring which involves patient data collection and program evaluation is partially implemented in the Federation of B&H, mainly due to the absence of a single registry for CVDs in BiH or at level of Federation of B&H. A complete reform of health statistical system and continual performance of relevant internationally comparable population surveys of trends of individual risk factors for CVDs offers room for a significant progress for the full implementation of CVDs monitoring in the Federation of B&H.

However, beside the review on segments of WHO HEARTS technical package for cardiovascular diseases management in primary health care, it is significant to underline support through the enforcement of recent policy and legislative measures in the Federation of B&H, which could have influence on CVDs management.

In 2017 the Federal Ministry of Health initiated documents of new Tobacco Control Strategy and the Law on Protection from Tobacco and Other Smoking Products in the Federation of B&H. This activity was realized with the support of the Swiss Government through the Swiss Development Agency and administration by the World Bank (WB) Office in B&H. The Law involves a complete ban of smoking in all closed places, protection of exposure to second-hand smoking, health warnings and a complete ban on all forms of tobacco advertisement, promotion and sponsorship. At the moment, the Law is completed as a proposal, accepted by the Federal Government in July 2018 and is ready for further procedure of Parliament enforcement. (31)

Additionally, in 2018, Federal Ministry of Health initiated a draft of Action plan for noncommunicable diseases in the Federation of B&H for the period 2019 - 2025, in which most part of CVDs risks factors are covered. (32)

## Conclusion

Similarly to other countries in WHO European region, current trends in morbidity and mortality from cardiovascular diseases are one of the major public health challenges in the Federation of B&H, causing significant rates of premature deaths, disability and increasing costs within the health and social care system.

This paper analyzed some aspects of the scope and comperhensivness of the public health interventions involved in CVDs management in the Federation of B&H, through estimated level of implementaion of six main WHO HEARTS elements: healthy life style, evidence-based treatment protocols, access to essential medicines and technology, risk-based management, team care and task-sharing and system for monitoring.

In the light of WHO HEARTS package, most part of the recommended standards for CVDs management are partially implemented in the Federation of B&H.

High exposure to behavioral CVDs risk factors in the Federation of B&H show only a partial implementation of healthy life style as one of important WHO HEARTS standards. More efforts should be made with the focus on health promotion interventions directed towards the whole population, aimed to increase their knowledge and change their attitude and behaviour related to CVDs and health risk factors.

WHO standards of evidence-based treatment protocols and risk-based management are fully implemented in the Federation of B&H due to recently enforcement of guidelines for CVDs in PHC with diagnostic and therapeutic protocols, as well training of health professionals, but CVDs prevention as a part of systematic monitoring of NCDs should include preventive services at all other levels of health care in the Federation of B&H.

Standard of CVDs system monitoring is improved through a reform of health statistical system and continual performance of population surveys, but more efforts are needed for the development of appropriate CVDs registry for B&H as a crucial segment of monitoring system.

Finally, further enforcement of legislative measures such as ban of smoking in public places, increases of tobacco prices, health warnings, increases in alcohol taxes, promotion of healthier diets through food pricing and labelling and marketing controls should be a form of a substantial support to public health interventions in CVDs management in the Federation of B&H. (33,34)

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# JAVNO ZDRAVSTVENE INTERVENCIJE U MENADŽMENTU KARDIOVASKULARNIH BOLESTI U FEDERACIJI BOSNE I HERCEGOVINE U SVIJETLU HEARTS STANDARDA SVJETSKE ZDRAVSTVENE ORGANIZACIJE KAO MODELA DOBRE PRAKSE


## Sažetak

***Cilj:*** Cilj ovog rada je procjena sadašnje uloge i utjecaja postojećih javno zdravstvenih intervencija u oblasti menadžmenta kardiovaskularnih bolesti (KVB) u Federaciji BiH, u skladu s međunarodnom dobrom praksom. ***Uvod:*** KVB kao rezultat interakcije između individualnih, metaboličkih, bihevioralnih i ekoloških faktora rizika, još uvijek predstavljaju vodeći javno zdravstveni izazov širom svijeta. ***Metode:*** procjena implementacije preporuka sadržanih u tehničkom paketu Svjetske zdravstvene organizacije (SZO) HEARTS standarda za menadžment KVB u Primarnoj zdravstvenoj zaštiti (PZZ) iz 2016 god. u odnosu na rezultate ostvarene kroz aktuelne javno zdravstvene intervencije uključene u menadžmemt KVB u Federaciji BiH. ***Rezultati:*** dokument SZO HEARTS standarda je tehnički paket sastavljen od strateških i operativnih mjera s ciljem smanjenja broja preuranjenih smrtnih slučajeva od KVB. Rad predstavlja osvrt na aktuelne javno zdravstvene intervencije koje su uključene u menadžment KVB u Federaciji BiH, klasificirane u skladu sa standardima šest elemenata dokumenta SZO HEARTS paketa kao što su: zdrav način života, protokoli zasnovani na dokazima, pristup osnovnim lijekovima i tehnologiji, upravljanje rizikom, podjela i timski rad i sistemi za praćenje. ***Zaključak***: Veći dio standarda za menadžment KVB navednih u dokumentu SZO HEARTS djelimično je implementiran u Federaciji BiH. Aktuelne stope morbiditeta i smrtnosti od KVB predstavljaju argument za potrebu aktivnijeg učešća javno zdravstvenih intervencija u menadžmentu KVB u Federaciji BiH.


**Ključne riječi:** kardiovaskularne bolesti, javno zdravstvo, Federacija Bosne i Hercegovine