Smanjenje kardiovaskularne smrtnosti i pobola – što još učiniti?

Reducing Cardiovascular Mortality and Morbidity – What Else Can Be Done?

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SAŽETAK: Budući da su kardiovaskularne bolesti (KVB) i dalje vodeći uzrok pobola i smrtnosti, pokušavamo unaprijediti naša nastojanja u svrhu njihova smanjenja. U svakodnevnom radu implementiramo smjernice kardiovaskularne (KV) prevencije te educiramo pacijente kako bi promijenili loše životne navike i stavili pod kontrolu KV čimbenike rizika. Međutim, sve to nije dovoljno bez potpore cjelokupnoga društva i politike države. Stoga se postavlja pitanje što trebamo još učiniti, kako djelovati. Na primjeru Nizozemske članak upućuje na to kojim su aktivnostima, akcijama i udrugama, ali i reformama uspješno smanjeni KV smrtnost i pobol.

SUMMARY: Since cardiovascular diseases (CVD) are still the leading cause of mortality and morbidity, we have been attempting to increase our efforts to reduce their incidence. In everyday practice we implement cardiovascular (CV) prevention guidelines and educate patients on changing bad lifestyle habits and controling CV risk factors. However, all of that is insufficient without the support of the whole society and public policies. So the question must be asked: what else can we do and how should we act? The example of the Netherlands is used to point out activities, initiatives, associations, and also reforms that have been successful in reducing CV mortality and morbidity.

KLJUČNE RIJEČI: kardiovaskularne bolesti, kardiovaskularna prevencija, smjernice.

KEYWORDS: cardiovascular diseases, cardiovascular prevention, guidelines.

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Uvod

Nažalost, tekstovi o kardiovaskularnoj (KV) prevenciji i dalje počinju rečenicom da su kardiovaskularne bolesti (KVB) vodeći uzrok smrtnosti i pobola u svijetu i u nas. Procjenjuje se da će do 2030. godine 23,6 milijuna ljudi godišnje umirati od KVB-a. Postoji blaga tendencija pada mortaliteta i incidencije KVB-a u sjevernoj, zapadnoj i južnoj Europi, a u srednjoj i istočnoj oni stagniraju.[1]

Znatan dio pobola i smrtnosti zbog KVB-a moguće je prevenirati intervencijama koje su troškovno učinkovite i dostupne. Svjetska zdravstvena organizacija (SZO) pretpostavlja da tri četvrtine svih smrti uzrokovanih KVB-om mogu biti spriječene promjenom loših životnih navika (pušenje, loše prehrambene navike, debljina, fizička neaktivnost, psihosocijalni stres), a one su usko povezane s nastankom KVB-a.[2] SZO svojim dokumentima potiče na provođenje integriranoga pristupa prevenciji KVB-a primjenom preventivnih programa.

Introduction

Unfortunately, texts on cardiovascular (CV) prevention still start with the fact that cardiovascular diseases (CVD) are the leading cause of mortality and morbidity both globally and in Croatia. It is estimated that by 2030 there will be 23.6 million deaths from CVD per year. There is a weak downward trend in mortality and incidence of CVD in North, West, and South Europe, whereas the mortality and incidence are stable in Central and Eastern Europe.[1]

A significant part of the mortality and morbidity due to CVD can be prevented by applying economical and readily-available interventions. The World Health Organization (WHO) estimates that three quarters of all deaths caused by CVD could be prevented by changing bad lifestyle habits (smoking, poor diet, obesity, lack of physical activity, psychosocial stress) which are closely associated with CVD.[2] WHO encourages

KV rizici (nepravilna prehrana, tjelesna neaktivnost, pušenje, arterijska hipertenzija, dijabetes, dislipidemija) pridonose ranom razvoju ateroskleroze, njezinoj progresiji i razvoju KVB-a (ishemijska bolest srca, cerebrovaskularna bolest, periferna arterijska bolest). Prije više od 10 godina SZO je izradio kartograme za procjenu stupnja rizika u pojedinaca, smjernice primarne i sekundarne KV prevencije.[2]

Europsko kardiološko društvo (ESC) objavilo je 1994. prve smjernice primarne i sekundarne KV prevencije. Otada su više puta revidirane, a zadnje su objavljene 2012. godine. Godine 2007. smjernice KV prevencije implementirane su u Povelju srčanog zdravlja. Od 2002. godine ESC aktivno sudjeluje u politici zdravlja te je kao svoj cilj zacrtao da nijedno novorođeno dijete u trećem tisućljeću ne oboli i ne umre od KVB-a prije svoje 65. godine života. Nakon Povelje srčanoga zdravlja, donesena je i Rezolucija Europskog parlamenta u borbi protiv KVB-a.

Prema zadnjim ESC-ovim smjernicama KV prevencije, smatra se da > 50 % KV mortaliteta možemo spriječiti prevencijom, a 40 % terapijskim mjerama.[3] KV prevencija mora započeti još u trudnoći i trajati tijekom cijelog života. Stoga su prijeko potrebni edukativni programi, trajno aktivno djelovanje na području javnoga zdravstva i individualni preventivni programi. ESC je proveo mnoga znanstvena istraživanja u KV prevenciji, a među značajnijima je EUROASPIRE.[4] Iz njega je proizišao projekt EUROACTION u kojemu se u svakodnevnoj kliničkoj praksi trebaju bolesnicima davati upute o zdravim životnim navikama kako bi stavili pod nadzor rizične čimbenike u primarnoj i sekundarnoj prevenciji.[5]

Primjer iz Nizozemske

Prije godinu dana prof J. Deckers i dr. R. Kraaijenhagen objavili su izvještaj o KV zdravlju Nizozemaca.[6] Nizozemski se zdravstveni sustav reformirao unatrag pet godina. Na 17 milijuna stanovnika imaju osam klinika, šest velikih i 15 malih bolnica, 900 kardiologa i 10 000 obiteljskih liječnika. Zdravstvena je zaštita decentralizirana na lokalnim razinama. Starenjem stanovništva raste prevalencija KVB-a, ali pada KV mortalitet. U Nizozemskoj su maligne bolesti postale glavni uzrok mortaliteta, a KVB su na drugom mjestu. Samo Španjolska i Francuska imaju manji KV mortalitet.[6]

Promjene navika i redukcija čimbenika rizika te pojedine mjere koje su pogodovale padu KV smrtnosti u Nizozemskoj jesu:

- smanjenje broja pušača
- visokozasićene masti isključene su iz prehrambenih prizvoda
- smanjen unos soli, ali još uvijek nedovoljan unos voća i povrća
- 60 % Nizozemaca fizički je aktivno (2011. godine pokrenut je program *Healthy Moving*)
- 34 % Nizozemaca ima ukupni kolesterol < 5,0 mmol/L
- prevalencija dijabetesa: 7 % muškaraca i 5,5 % žena
- arterijska hipertenzija: 17 % Nizozemaca od 30. do 39. godine i 71 % od 70. do 80. godine života
- bolje organizirana invazivna kardijalna skrb.

U Nizozemskoj je prevencija podijeljena u četiri stupnja.

1. **UNIVERZALNA** – obuhvaćena je opća populacija (ciljevi su promicanje zdravlja, redukcija čimbenika rizika i sprječavanje bolesti).

the implementation of an integrated approach to CVD prevention through preventive programs. CV risk factors (improper diet, lack of physical activity, smoking, arterial hypertension, diabetes, dyslipidemia) contribute to the early development of atherosclerosis, its progression, and the development of CVD (ischemic heart disease, cerebrovascular disease, peripheral artery disease). More than 10 years ago, WHO created cartograms for individual risk estimation as well as guidelines for primary and secondary CV prevention.[2]

The European Society of Cardiology (ESC) published their first guidelines on primary and secondary CV prevention in 1994. They have been revised several times since then, most recently in 2012. In 2007 CV prevention guidelines were incorporated into the European Heart Health Charter. Since 2002, ESC has actively participated in health policies with the stated goal that no child born in the third millennium should suffer or die from CVD before age 65. After the European Heart Health Charter, the European Parliament adopted a Motion for a Resolution on Action to tackle Cardiovascular Disease.

According to latest ESC guidelines on CV prevention, >50% of CV mortality can be eliminated through prevention, and 40% through treatment measures.[3] CV prevention must start already in pregnancy and last throughout the person's life. Thus, education programs, continuous action in public health, and individual health programs are all sorely needed. ESC has undertaken many studies on CV prevention, of which EUROASPIRE is among the most significant ones.[4] It lead to the EUROACTION project in which patients are given advice on healthy lifestyle habits during everyday clinical practice in order to manage risk factors in primary and secondary prevention.[5]

The example of the Netherlands

One year ago, Prof J. Deckers and R. Kraaijenhagen, MD published a report on CV health in the Nethelands.[6] The health system of the Netherlands underwent reform five years ago. There are eight clinics, six large and 15 smaller hospitals, 900 cardiologists, and 10 000 family physicians for a population of 17 million people. Health care is decentralized at local levels. Aging of the population leads to increasing prevalence of CVD, but CV mortality is dropping. In the Netherlands, malignant diseases have become the main cause of mortality, with CVD in second place. Only Spain and France have lower CV mortality.[6]

Lifestyle changes, risk reduction measures, and other individual measures that facilitated CV mortality reduction in the Netherlands are the following:

- Reduction in the number of smokers
- Saturated fats were removed from food products
- Salt intake has been reduced, but the intake of fruit and vegetables is still insufficient
- 60% of the population is physically active (the *Healthy Moving* program was started in 2011)
- 34% have total cholesterol <5.0 mmol/L
- Diabetes prevalence: 7% in men and 5.5% in women
- Arterial hypertension: 17% of the population from 30 to 39 years of age, and 71% of the population from 70 to 80 years of age

2. **SELEKTIVNA** – identifikacija visokorizičnih bolesnika i poduzimanje ciljanih preventivnih mjera.
3. **INDICIRANA** – u visokorizičnih bolesnika prevenirati razvoj bolesti i njezinih komplikacija (uključuje se i medikamentna terapija).
4. **PREVENCIJA LIJEČENJEM** – sprječavanje komplikacija KVB-a.

Potkraj 2013. godine Nizozemska je donijela Nacionalni preventivni plan koji uključuje lokalne i državne vlasti, industriju i socijalno-obrazovne organizacije. Taj se preventivni plan sastoji od triju glavnih ciljeva:

- promicanja zdravlja i prevencije bolesti u okolini gdje ljudi žive, rade i uče
- prevenciji se dodjeljuje važna uloga u zdravstvenoj skrbi
- sačuvati odgovarajuću zdravstvenu zaštitu.

Tim se planom promiče univerzalna, individualna, selektivna prevencija u zajednicama. Pridaje se važnost ranoj detekciji bolesti i liječenju te regulaciji čimbenika rizika, čime se smanjuje pobol.

Tijekom 2005. godine NIPED (Nizozemski institut za prevenciju i ranu dijagnostiku) pokrenuo je PIHMS (personaliziranu integriranu zdravstvenu potporu), a 2010. god. različite medicinske udruge donijele su standarde prevencije kardiometaboličkih bolesti.

Nizozemska je u svrhu prevencije razvila mnoge aktivnosti i društva na svim razinama npr.: *Healthy Weight, Young People with Healthy Weight, Healthy School, Alliance Smokefree Netherlands, Prevention Consult Alliance, Individual Care Plan for Cardiovascular Risk Management*...[6]

Što možemo (trebamo) učiniti

Primjer Nizozemske upozorava na važnost aktivacije svih segmenata društva u zajedničkom cilju KV prevencije kako bi se smanjili morbiditet i mortalitet. Ekonomska recesija koja je već niz godina prisutna u Hrvatskoj ne samo da se odražava na loše socijalno ekonomsko stanje stanovništva nego i na loše kardiovaskularno zdravlje sa sve većim primjenama loših životnih navika, a bez jasnih globalnih preventivnih mjera i aktivnosti društva. Naša znanstvena i medicinska zajednica stoga treba i u ovakvim uvjetima uložiti više napora kako bi se na lokalnoj i državnoj razini donosile zakonske i druge uredbe za aktivno provođenje cjeloživotne KV prevencije. Ministarstvo zdravlja RH donijelo je 2001. god. Nacionalni program prevencije KVB-a. Međutim, nije uslijedio provedbeni plan.

Svake godine provodimo pojedine preventivne akcije na razini različitih medicinskih društava, a najviše ih je tijekom Svjetskog dana srca. To, međutim, nije dovoljno. U svojemu svakodnevnom radu s pacijentima radimo samo na individualnoj razini (savjetujemo, educiramo, liječimo...).

I u tom nam radu nedostaje bolja međusobna povezanost i suradnja (specijalista različitih struka međusobno i s obiteljskim liječnicima) u svrhu što bolje kontrole pacijenata u stvaranju zajedničkih aktivnosti u preventivnim mjerama i terapijsko-dijagnostičkim postupcima. U primarnoj zdravstvenoj zaštiti trebalo bi u elektroničkom obliku za svakog pacijenta implementirati tablice procjene KV rizika (SCORE, relativni

- Improved organization of invasive cardiac care.

In the Netherlands, prevention is divided into four levels:

1. **UNIVERSAL** – encompasses the whole population (goals are promoting health, reduction in risk factors, and disease prevention.
2. **SELECTIVE** – identification of high-risk patients and undertaking targeted preventive measures.
3. **INDICATED** – prevention of disease progression and complications in high-risk patients (includes medication treatment)
4. **PREVENTION THROUGH TREATMENT** – preventing complications of CVD.

In late 2013, the Netherlands adopted the National Prevention Plan that incorporated local and state authorities, the industry, and social and educational institutions. This preventive plan is comprised of three main goals:

- Promoting health and disease prevention in areas where people live, work, and learn
- Prevention is given an important role in health care
- Securing appropriate health care.

This plan promotes universal, individual, selective prevention in communities. Early disease detection and treatment and regulation of risk factors are given high priority, which reduces morbidity.

The Netherlands Institute for Prevention and e-Health Development (NIPED) started Personalised Integrated Health Management Support (PIHMS) in 2005, and various medical associations adopted prevention standards for cardiometabolic diseases in 2010.

The Netherlands has formed and implemented numerous associations and initiatives for prevention at all levels, including: Healthy Weight, Young People with Healthy Weight, Healthy School, Alliance Smokefree Netherlands, Prevention Consult Alliance, Individual Care Plan for Cardiovascular Risk Management, etc.[6]

What we can (and should) do

The example of the Netherlands shows the importance of cooperation between all segments of society in CV prevention with the goal of reducing mortality and morbidity from these diseases. The economic recession that has been taking place in Croatia for a number years causes not only the poor social and economic state of the population but poor cardiovascular health as well through a growing tendency towards poor lifestyle habits, without any clear global preventive measure and initiative at the level of the whole society. Thus, our scientific and medical community should, even in these conditions, invest more effort to push for legal and other measures at the local and state levels to actively conduct lifetime CV prevention. The Ministry of Health of the Republic of Croatia adopted the National CVD Prevention Program in 2001. However, this was not followed up by an implementation plan.

Every year, we undertake individual preventive initiatives at the level of different medical societies, especially during the World Heart Day. This, however, is not enough. In our everyday practice we engage patients only at the individual level (with advice, education, treatment, etc.).

rizik) i smjernice KV prevencije (obiteljski bi liječnici trebali obavljati preventivne preglede, procjene KV rizika).

Treba djelovati što više na lokalnoj razini u promicanju zdravih životnih navika, da te aktivnosti budu dostupne svima (edukacijska predavanja, propagandni materijal; tjelovježba, tehnike opuštanja, odvikavanje od pušenja...) te na razini države kako bi se zakonskom regulativom zabranilo pušenje na javnim mjestima, reducirala sol, rafinirani šećeri i visokozasićene masti u prehrambenim proizvodima, provoditi preventivne programe na svim razinama, a osobito u predškolskoj i školskoj dobi.

Boljom suradnjom vladinih i nevladinih udruga i medicinskih društava treba stvoriti zajedničku strategiju u promicanju zdravih životnih navika, prevenciji i prepoznavanju KV rizika. Time bismo izbjegli da najveći teret KV prevencije snose liječnici, nažalost, sve više kardiolozi, koji se najčešće suočavaju s već razvijenim KVB-om te liječenjem njegovih komplikacija. Cilj nam treba biti misao Browna i O'Connora: „Moramo stvoriti zdravo društvo i inkorporirati prevenciju u svakodnevni život."

Zaključak

Danas je u Hrvatskoj najveći teret KV prevencije na liječnicima. Time postižemo samo individualnu prevenciju. Ne postoji sustavna politika društva koja bi djelovala na cijelu populaciju.

Može li nam Nizozemska svojim primjerom aktivnosti KV prevencije na razini cijeloga društva biti primjer? Mislim da nam je dobar uzor i u ovim uvjetima ekonomske recesije. Mediteranska smo zemlja, a Francuska i Španjolska kao mediteranske zemlje imaju najbolje rezultate u redukciji KV morbiditeta i mortaliteta. Cilj nam je svima produljenje prosječnoga životnog vijeka uz smanjenje prijevremenog umiranja od KV bolesti.

We lack better coordination and cooperation (among specialists and with family physicians) in order to manage patients in creating group preventive initiatives and in treatment and diagnostic procedures. In primary health care, a CV risk assessment table (SCORE, relative risk) should exist for every patient along with CV prevention guidelines (family physicians should perform preventive checkups, CV risk assessment).

We should, as much as possible, act at the local level in the promotion of healthy lifestyle habits in order to make those activities available to everyone (educational lectures, promotional material, exercises, relaxation techniques, smoking cessation, etc.). At the state level, legal measures should be introduced to disallow smoking in public places, reduce intake of salt, refined sugar, and saturated fats in food products, and implement preventive programs at all levels, in particular for in early childhood education and in schools.

Better cooperation between governmental and non-governmental organizations and medical associations should result in a joint strategy in promoting healthy lifestyle habits and CV risk identification and prevention. This would avoid placing most of the CV prevention burden on physicians, and, unfortunately, mostly on cardiologists who are usually faced with treating already progressed CVD and the resulting complications. Our guiding idea should be the quote from Brown and O'Connor: "We must create a healthy society and incorporate prevention into everyday life".

Conclusion

In Croatia today, most of the burden of CV prevention rests on the doctors themselves. This achieves only individual prevention. There is no systematic social policy that would affect the whole population.

Can the CV prevention initiatives in the Netherlands, implemented at the level of the whole society, serve as an example for us? I think that they would be a good role-model even in this economic recession. We are a Mediterranean country, and France and Spain, Mediterranean countries as well, have the best results in CV mortality and morbidity reduction. The goal of all of us is to extend the average lifetime and reduce premature death from CV diseases.

LITERATURE

1. Kralj V, Brkić Biloš I. Morbidity and mortality from cardiovascular diseases. Cardiol Croat. 2013;8(10-11):373-378. **DOI:** http://doi.org/10.15836/ccar.2013.373
2. WHO. Prevention of Cardiovascular Disease. Pocket Guidelines for Assessment and Management of Cardiovascular Risk (WHO/ISH Cardiovascular Risk Prediction Charts for WHO epidemiological sub-regions AFR Dand AFRE). Geneva 2007. http://www.who.int/cardiovascular_diseases/guidelines/PocketGL.ENGLISH.AFR-D-E.rev1.pdf (25. 7. 2015).
3. Perk J, De Backer G, Gohlke H, Graham I, Reiner Z, Verschuren M, et al; European Association for Cardiovascular Prevention & Rehabilitation (EACPR); ESC Committee for Practice Guidelines (CPG). European Guidelines on cardiovascular disease prevention in clinical practice (version 2012). The Fifth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of nine societies and by invited experts). Eur Heart J. 2012;33(13):1635-701. **DOI:** http://doi.org/10.1093/eurheartj/ehs092
4. Kotseva K, Wood D, De Backer G, De Bacquer D, Pyörälä K, Reiner Z, Keil U; EUROASPIRE Study Group. EUROASPIRE III. Management of cardiovascular risk factors in asymptomatic high-risk patients in general practice: cross-sectional survey in 12 European countries. Eur J Cardiovasc Prev Rehabil. 2010;17(5):530-40. **DOI:** http://doi.org/10.1097/HJR.0b013e3283383f30
5. Wood DA, Kotseva K, Connolly S, Jennings C, Mead A, Jones J, et al; EUROACTION Study Group. Nurse coordinated multidisciplinary family-based cardiovascular disease prevention programme (EUROACTON) for patients with coronary heart disease and asymtomatic individuals at high risk of cardiovascular disease: a paired, cluster-randomised controled trial. Lancet. 2008;371(9629):1999-2012. **DOI:** http://doi.org/10.1016/S0140-6736(08)60868-5
6. Country report the Netherlands Feb 2014, J. Deckers and R. Kraaijenhagen. http://www.escardio.org/static_file/Escardio/Subspecialty/EACPR/netherlands-country-report.pdf (25. 7. 2015).