CVD RISK FACTORS AND THEIR PERCEPTION OLDER ADULTS

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Causes of Death in Croatia – 2015 (estimated 4,203,604 inhabitants)

- Cardiovascular: 47%
- Malignant: 27%
- Injuries: 5%
- Gastrointestinal: 5%
- Respiratory: 4%
- Other: 10%

Croatian Health Service Yearbook for 2015
“Will You Still Need Me, Will You Still Feed Me, When I’m Sixty-four?”

John Lennon & Paul McCartney

Sergeant Pepper’s Lonely Hearts Club Band

1967
- In 2011, 17.7% population was older than 65 years
- In 2015, 44,350 individuals older than 65 died (in 2014, 41,200) - 81.8% of all deaths
- Mortality rate for those older than 65 is 55.5 /1,000
- In the 65+ group most died of CVD with a rate of 28.9/1,000 and the second most common cause of death were malignant diseases with a rate of 12.9/1,000
PERCEPTION OF CARDIOVASCULAR RISK FACTORS IN CROATIA – ELDERLY (PERCRO- ELD Survey) - METHOD

- A questionnaire with 25 multiple choice questions
- In 37 pharmacies covering the whole area of Croatia consecutively all customers aged >70 years willing to answer
- 969 respondents (questionnaires finished)
- Participants were also tested for their total cholesterol and and triglyceride blood concentrations (Accutrend® Plus System and Accutrend Plus Cholesterol/Triglycerides Test Strips); their BP, height and body weight was measured.

Elderly - Fear of listed diseases

Cancer was perceived as the most feared disease

Multiple choices were allowed

Mazalin J, Sonicki Z, Reiner Ž. Arch Gerontol Geriatr 201561:88-92
Elderly - Awareness of the leading cause of death

Only 30% correctly identified heart disease as the leading cause of death in Croatia.

Elderly - Opinion on risk ranks for CVD

Rank list based on scale from 1 to 10 indicates perception of high blood pressure as the most important risk factor (the smaller the bar the higher position)

- Physical inactivity
- Low HDL level
- Family history
- Excessive alcohol intake
- Stress
- Diabetes
- Smoking
- Obesity
- High total cholesterol levels
- High blood pressure

Elderly - Visits to GP within last year

7% participants did not visit GP within a last year

- 21% None
- 5% Once a month
- 16% 2-3 times/month
- 31% 4-6 times/month
- 20% More than once a month

Elderly - GP clarified risks to patient

42% of participants did not receive any information on possible risks

Elderly - Knowledge of total cholesterol target values (in mmol/L)

Elderly - Knowledge of BP target values (in mm Hg)

Elderly - The reality - lipids

Elderly - The reality - Blood pressure and BMI

PERCEPTION OF CARDIOVASCULAR RISK FACTORS IN CROATIA – GENERAL POPULATION (PERCRO Survey) - METHOD

• A questionnaire with 25 multiple choice questions
• In 37 pharmacies covering the whole area of Croatia consecutively all customers willing to answer
• 883 respondents (questionnaires finished)
• September 1 to November 30, 2008

Reiner Ž et al. Prev Med 2010; 51:494-496
General population - Fear of listed diseases

Cancer was perceived as the most feared disease

- Cancer: 40.0%
- Cerebrovascular Disease: 14.5%
- AIDS: 5.1%
- Heart Disease: 21.6%
- Liver Disease: 2.0%
- Tuberculosis/Lung Disease: 0.2%
- Don’t Know/No Answer: 16.5%
General population - Awareness of leading cause of death

Only 36.2% correctly identified heart disease as the leading cause of death in Croatia.
General population - Perception of their own risk

60% persons reported that they were at high or medium risk for cardiovascular or cerebrovascular disease.

Reiner Ž et al. Prevent Med 2010; 51:494-6
General population - Knowledge of total cholesterol and BP target levels

Total cholesterol levels (mmol/l)

- <5: 30,8%
- <5,2: 26,2%
- <6,5: 5,9%
- <7,8: 30,9%
- No Answer: 6,2%

Blood pressure (mmHg)

- <120/80: 33,9%
- <130/85: 34,2%
- <140/90: 8,5%
- <150/90: 3,3%
- No Answer: 20,2%

Reiner Ž et al. Prevent Med 2010; 51:494-6
General population - Opinion on risk ranks for CVD

Rank list based on scale from 1 to 10 indicates perception of high blood pressure as the most important risk factor (the smaller the bar the higher position)

High blood pressure
High cholesterol levels
Diabetes
Family history
Smoking
Low HDL level
Obesity
Stress
Excessive alcohol intake
Physical inactivity

Reiner Ž et al. Prevent Med 2010; 51:494-6
General population - Visits to GP within a year

19% participants did not visit GP within a last year

- None: 22.8%
- 2-3 times: 19.1%
- 4-6 times: 33.4%
- Once a Month: 19.0%
- More than Once a Month: 4.5%
- No Answer: 1.1%
General Population - GP clarified risks to patient

54.1% of patients did not receive any information on possible risks

- High Cholesterol Levels: 21.5%
- High Blood Pressure: 33.1%
- Smoking: 15.5%
- Obesity/Overweight: 16.1%
- None: 54.1%

Reiner Ž et al. Prevent Med 2010; 51:494-6
PERCEPTION OF CARDIOVASCULAR RISK FACTORS IN CROATIA – DOCtors (PERCRO - DOC Study) - METHOD

• A questionnaire with 21 multiple choice questions
• 1382 respondents (questionnaires finished)
• 44.7% GPs, 22.6% family medicine specialists, 11.9% cardiologists and 15.4% internists
• March 1 to June 30, 2008

PERception of cardiovascular risk factors in CROATIA – Medical students (PERCRO-STUD Survey) - METHOD

- An anonymous questionnaire with 25 multiple choice questions
- All 228 students entering the School of Medicine, University of Zagreb, Croatia on their enrolment day in 2008 and
- 214 students of the same school answered the same questionnaire on the day of their final exam for MD in September 2008.

Doctors by speciality

- Family Doctors: 68.9%
- Cardiologists: 12.2%
- Internists: 18.8%
- Neurologists: 3.0%

Guidelines’ usefulness

- Very useful: 75.5% Cardiologists, 82.7% Internists, 82.7% Primary care
- Fairly useful: 20.9% Cardiologists, 15.4% Internists, 22.9% Primary care
- Not useful: 0.3% Cardiologists, 0.6% Internists, 0.3% Primary care
- Do not know guidelines: 1.8% Cardiologists, 1.2% Internists, 1.2% Primary care

Reiner Ž et al. Atherosclerosis 2010;213:598:603
Following of CVD prevention guidelines by speciality

- International Atherosclerosis Society guidelines
- US Guidelines
- Joint European guidelines from 2007
- Joint European guidelines from 1998
- Institution guidelines
- Own judgment

Reiner Ž et al. Atherosclerosis 2010;213:598:603
Knowledge on optimal blood pressure in high risk patients

Reiner Ž et al. Atherosclerosis 2010;213:598:603
Knowledge of recommended HDL-cholesterol in women (mmol/l)

Reiner Ž et al. Atherosclerosis 2010;213:598:603
Knowledge on recommended LDL-cholesterol in patients with diabetes (mmol/l)

Reiner Ž et al. Atherosclerosis 2010;213:598-603
Do you prescribe a statin to all your patients with MI, proven CHD, stroke, diabetes?

Prepišete li svakom bolesniku s preboljelim infarktom miokarda, dokazanom koronarnom bolešću, dijabetesom, preboljelim cerebrovaskularnim inzultom, tranzitornom ishemijskom atakom i plakom na kariotidi obvezatno antilipemik

Do you believe that you treat well your patients with dyslipidaemia?

Smatrate li da dobro liječite svoje bolesnike hipelipidemijom

Conclusions

• In the general population as well as in the elderly cancer was perceived as the most feared disease, second was CHD, third stroke and in the elderly cancer was also perceived as the most feared disease, second immobility, third stroke, fourth CHD

• Only one third of the general population and of the elderly subjects correctly identified heart disease as the leading cause of death in Croatia while the majority perceived cancer as the leading cause

• Perception of high blood pressure as the most important risk factor in the general population as well as in the elderly
Conclusions

• Although a vast majority of physicians support the guidelines use, only half of them use them really.

• Too many of them don’t know, for example, the target values for lipids according to the guidelines and in average their knowledge of guidelines is not satisfactory.

• However, most of them are convinced that they are treating their patients with dyslipidaemia well.

• All this is, together with the lack of time and finances and perceived lack of patients’ awareness, probably one of the causes why they do not manage CVD risk factors of their patients better.
Conclusions

• 54.1% of the general population and 42% of elderly subjects did not receive any information on possible risks from their GP. Only 34% of the elderly got an information about high cholesterol (general population 21.5%)

• The mean total cholesterol and triglycerides values in the elderly population are acceptable but BMI is 27

• 70% of elderly do not smoke and 13% are former smokers (better than in general population)

• Insufficient awareness of CVD factors including dyslipidemia in the general population and in the elderly and a need for improved promotion of CVD prevention
“Growing old is hell - but it’s better than the alternative”

George Burns
US actor
95 years
Thank you!