EUROPEAN SURVEY OF CARDIOVASCULAR DISEASE PREVENTION AND DIABETES

EUROASPIRE IV

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Presenter Disclosure Information

G.De Backer: EUROASPIRE IV

No interests to declare related to this presentation.
Strategies on CVD Prevention

Research

Guidelines

Implementation

Audit

EuroAspire I, II, III, IV

SCORE Evidence based reviews


PIC JPC Nat. Coord
EUROASPIRE I  Objective

➢ To determine in patients with CHD whether the European recommendations on secondary prevention have been implemented in clinical practice.

Eur Heart J 1997; 18: 1569-1582
EUROASPIRE II

Scientific Objectives

EUROASPIRE

* To determine in patients with CHD whether the major risk factors for recurrent CHD are being effectively managed by lifestyle and, when appropriate, drug therapy.
  Eur Heart J 2001; 22:554-72

* To compare the implementation of secondary prevention of CHD between the EUROASPIRE I and II surveys.
  Lancet 2001; 357: 995-1001

* To determine in the families of patients with premature CHD whether screening for risk factors has occurred and appropriate action has been taken
  Eur Heart J 2003 Feb;24(3):249-57.

* To determine the relationships between risk factors measured at interview and event-free survival in patients from EUROASPIRE I.
EUROASPIRE III  Objectives

- To determine in patients with CHD and in high risk individuals whether the European guidelines on cardiovascular disease prevention are being followed.

- To determine whether the practice of preventive cardiology in patients with CHD disease has improved over time.
# Implementation of guidelines in clinical practice

<table>
<thead>
<tr>
<th>Guidelines 2003</th>
<th>EuroAspire III, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking Cessation/smokers</td>
<td>48</td>
</tr>
<tr>
<td>Regular Physical activity</td>
<td>34</td>
</tr>
<tr>
<td>BMI &lt; 25 kg/m²</td>
<td>18</td>
</tr>
<tr>
<td>Waist circumference &lt; 94 cm (men)</td>
<td>25</td>
</tr>
<tr>
<td>&lt; 80 cm (women)</td>
<td>12</td>
</tr>
<tr>
<td>BP &lt; 140/90 mmHg</td>
<td>50</td>
</tr>
<tr>
<td>Tot. cholesterol &lt; 4.5mmol/l (175 mg/dL)</td>
<td>49</td>
</tr>
<tr>
<td>LDL cholesterol &lt; 2.5 mmol/l (100 mg/dL)</td>
<td>55</td>
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<tr>
<td>In patients with diabetes:</td>
<td></td>
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<tr>
<td>HbA1c &lt; 6.5%</td>
<td>35</td>
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EUROASPIRE III. Management of cardiovascular risk factors in asymptomatic high-risk patients in general practice: cross-sectional survey in 12 European countries

K. Kotseva, D. Wood, G. De Backer, D. De Bacquer, K. Pyörälä, Z. Reiner and U. Keil; the EUROASPIRE Study Group

Conclusion: The EUROASPIRE III survey in general practice shows that the lifestyle of people being treated as high cardiovascular risk is a major cause of concern with persistent smoking and high prevalence of both obesity and central obesity. Blood pressure, lipid and glucose control are completely inadequate with most patients not achieving the targets defined in the prevention guidelines. Primary prevention needs a systematic, comprehensive, multidisciplinary approach, which addresses lifestyle and risk factor management by general practitioners, nurses and other allied health professionals, and a health care system which invests in prevention.

EUROASPIRE scientific output

Publications in English scientific journals:
- European Heart Journal
- The Lancet
- Int J Cardiol
- J Hypertens
- Heart
- Eur J Epidemiol
- Atherosclerosis
- Diabetologia
- J Epidemiol Community Health
EUROASPIRE scientific output

- Hungarian : Orv Hetil. 2003; 144: 2399-404
- Polish : Kardiol Pol 2009; 67: 1353-9
- Dutch : Ned Tijdschr Geneeskr 2010; 154: 1229
- Turkish : Turk Kardiyol Dern Ars 2010; 38: 164-72
- Russian : Kardiologiia 2011; 51: 34-40
- German : Dtsch Arztebl Int 2012; 109: 303-10
EUROPEAN SURVEY OF CARDIOVASCULAR DISEASE PREVENTION AND DIABETES

EUROASPIRE IV
Objectives

To determine in patients with CHD whether the European guidelines on cardiovascular disease prevention are being followed in everyday clinical practice.

To determine whether the practice of preventive cardiology in patients with CHD has improved by comparison with EUROASPIRE I, II and III.

To follow up patients from EUROASPIRE I, II and III for total and cause-specific mortality to determine the relationships between risk factors measured at interview and event free survival.
To compare diagnostic and therapeutic strategies in patients with CHD in relation to glucose metabolism (impaired fasting glycaemia, impaired glucose tolerance and diabetes) and chronic kidney disease (CKD)

To identify opportunities to improve patient management by improving established or developing new guidelines and their implementation
What’s new?

Assessment of cardio-metabolic state with emphasis on dysglycaemia (IFG, IGT, DM) based on a routine OGTT and HbA1c, together with measures of CKD (creatinine/eGFR, urine albumin/creatinine ratio) in all patients

Relationship between risk factors management and one year non-fatal and fatal outcomes
Geographical area and sampling frame

- One geographical area per country with a population > half million people

- At least one hospital offering interventional cardiology and cardiac surgery, and one or more acute hospitals receiving patients with acute myocardial infarction and ischaemia

- The same geographical area and hospitals will be used in those countries that participated in EUROASPIRE I, II and III, although new hospitals can be added from within the area
Coronary patients

- Consecutive patients, men and women < 80 yrs, hospitalised at least 6 months and at most 3 years prior to the interview

1) Elective or emergency CABG
2) Elective or emergency PCI
3) Acute Myocardial Infarction (AMI) (ST-elevation or non-ST elevation MI)
4) Acute Myocardial Ischaemia (Ischaemia) but NO evidence of AMI (Troponin negative)
Outcome Measures

Proportions of coronary patients achieving the European lifestyle, risk factor and therapeutic targets for cardiovascular disease prevention defined in the 2007 Joint European Societies Guidelines on CVD prevention
EUROASPIRE Strengths

- Trained research assistants
- Consecutive series of patients
- Standardized measurements questionnaires / instruments
- Central laboratory
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<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2012</td>
<td>Central training of research assistants</td>
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<tr>
<td>March</td>
<td></td>
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<tr>
<td>2012</td>
<td>Retrospective identification, interview and bioclinical examination of coronary patients</td>
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<tr>
<td>April</td>
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<tr>
<td>2012</td>
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<td>April –</td>
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<tr>
<td>December</td>
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<tr>
<td>2013</td>
<td>EUROASPIRE IV Principal results presented at EUROPREVENT Rome 2013</td>
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<td>April</td>
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<tr>
<td>2013</td>
<td>Comparison of the EUROASPIRE surveys I, II, III and IV, presented at the ESC Congress in Amsterdam 2013</td>
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<td>August</td>
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Coordination

• Coordinating Centre
  Department of Cardiovascular Medicine
  Imperial College London, UK

• Diabetes Centre
  Department of Cardiology, Karolinska University Hospital,
  Stockholm, Sweden

• Data Management Centre
  EURObservational Research Programme Department,
  European Heart House, Sophia Antipolis, France

• Statistical Centre
  Department of Public Health, University of Ghent

• Central Laboratory
  National Public Health Institute, Helsinki, Finland
THANK YOU FOR YOUR ATTENTION