Time Trends in Cardiovascular Risk Factor Management in Coronary Patients in Europe: Results from Three EUROASPIRE Surveys 1999-2013

Background: Three EUROASPIRE surveys were conducted over 14 years in 9 countries - Belgium, Czech Republic, Finland, France, Ireland, The Netherlands, Poland, Slovenia and the United Kingdom - under the auspices of the European Society of Cardiology, Euro Heart Survey and the EURObservational Research Programme. The objective was to describe time trends in the lifestyle and risk factor management in coronary patients across Europe.

Methods: 12,775 patients (≤ 70 years) with CABG, PCI or an acute coronary syndrome were identified over 14 years and 8,456 were interviewed and examined at least 6 months later.

Results: Prevalence of smoking remained unchanged in the three surveys (21%, 20%, 18%; p=0.55). Prevalence of obesity (BMI ≥ 30 kg/m²) and central obesity (waist circumference ≥ 102 cm men and ≥ 88 cm women) increased (32%, 33%, 39%; p=0.007) and (51%, 51%, 57%; p=0.04) respectively. Prevalence of blood pressure ≥ 140/90 mmHg (≥ 140/80 mmHg in diabetes) decreased (54%, 52%, 45%; p=0.01) as the therapeutic control in patients on blood pressure lowering medication improved from 46% to 55% (p=0.01). The proportions with LDL cholesterol ≥1.8 mmol/l decreased (96%, 80%, 75%; p<0.001) as therapeutic control in patients on lipid lowering medication improved from 6% to 26% (p<0.0001). Prevalence of self-reported diabetes increased across the three surveys: 19%, 24%, 27%) but there was no change in the prevalence of undetected diabetes: 11%, 11%, 12%. Prescriptions for cardioprotective medications increased between the first and second surveys, with no further significant changes between the second and third surveys; antiplatelets (85%, 94%, 95%), beta-blockers (63%, 82%, 81%), ACE/ARB's (42%, 72%; 71%), statins (55%, 89%, 89%).

Conclusion: Adverse lifestyle trends among European coronary patients with alarming increases in obesity, central obesity and diabetes, are a cause for concern. Despite the high use of cardioprotective medication, substantial proportions of patients still remain above the recommended blood pressure and lipid targets. All coronary patients require a modern preventive cardiology programme to help them achieve the lifestyle and risk factors targets for cardiovascular prevention.