

# Latest EUROASPIRE Surveys Reveal Continuing Health Concerns

Written by Brian Hoyle

Lifestyle modification and aggressive risk factor control continue to be a priority for those at high risk of developing cardiovascular diseases (CVDs), according to the EUROASPIRE III and IV surveys conducted in 2006-2007 and 2013-2015, respectively. The continuing bleak outlook was summarized by Kormelia Kotseva, MD, Imperial College London, London, UK.

The EUROASPIRE surveys concerned with CVD prevention—which began in 1995 under the auspices of the European Society of Cardiology, Euro Heart Survey, and subsequently the EURObservational Research Programme—have been designed to identify risk factors in coronary patients and individuals at high risk for CVD, to clarify patient management through lifestyle modifications and drugs, and to assess how effectively current knowledge is being used in general practice. Here, the EUROASPIRE III and IV findings were compared to better gauge the changes that had occurred in lifestyle/risk factor management and the use of cardioprotective drugs in people at high risk of developing CVD.

EUROASPIRE III and IV involved a total of 3827 patients (Table 1).

Consecutive men and women <80 years old from Bulgaria, Croatia, Poland, Romania, and the UK with no history of coronary or other atherosclerotic disease were included. Medications prescribed  $\geq 6$  months and  $\leq 3$  years prior to survey participation included drugs intended to lower blood pressure, lipid, and/or glucose. Height, weight, waist circumference, blood pressure, breath carbon monoxide, and analyses of fasting venous blood for parameters including serum total cholesterol, high-density lipoprotein cholesterol, calculated low-density lipoprotein cholesterol, triglycerides, glucose, and glycated hemoglobin were done with the same protocols and instruments and in the same geographic regions, permitting direct comparison of survey data.

The overall prevalence of smoking remained constant at 17%. However, there were marked variations, including a 17–percentage point increase in Bulgaria (5% to 22%), decreases of about 9 points in both Poland (31% to 22%) and Romania (18% to 9%), and no change in the UK. Overall, the prevalence of current smokers with no intention to quit rose by 11 percentage points, from 23% in EUROASPIRE III to 34% in EUROASPIRE IV ( $P = .004$ ).

The prevalence of individuals defined as being overweight (body mass index  $\geq 25$  kg/m<sup>2</sup>) was high in both surveys (82%; Figure 1).

Overall, central obesity, defined as waist circumference  $\geq 88$  cm in women and  $\geq 102$  cm in men, increased by 6 percentage points ( $P = .052$ ). Obese patients who had been told that they were overweight and who were counseled by a health care professional concerning an unhealthy diet composed 56% and 73% of the EUROASPIRE III survey and 54% and 71% of the EUROASPIRE IV survey, respectively. Overall, the prevalence of obese patients trying to lose weight and those contemplating weight loss at the time of survey rose by only 4 and 1 percentage point(s), respectively, from 2007 to 2015 ( $P = .34$  and  $.86$ , respectively). Variations among countries were evident.

Exercise was generally not a widely adopted practice (Figure 2).

Improvements had been made in each country in therapeutic control of blood pressure (28% and 35% in EUROASPIRE III and IV, respectively), total cholesterol (29% and 38% in EUROASPIRE III and IV, respectively), and low-density lipoprotein cholesterol (29% and 37% in EUROASPIRE III and IV, respectively), but there was no significant difference between the 2 surveys for these outcomes. There was no improvement in the glucose control in patients with diabetes mellitus, with glycated hemoglobin being 62% and 60% in EUROASPIRE III and IV, respectively.

The findings indicate the need for lifestyle and medical interventions and a focus on preventive health care that is relevant to the medical and cultural settings in each country.

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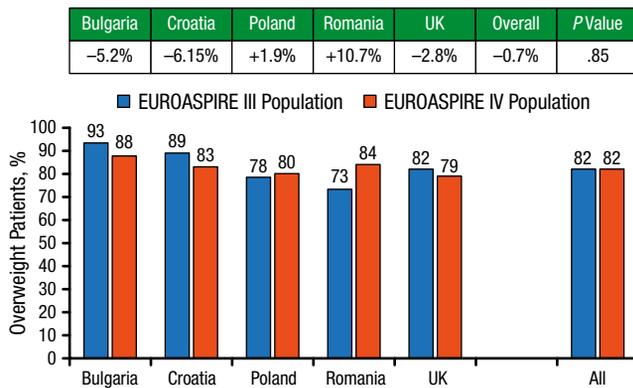


Table 1. Study Population of EUROASPIRE III and IV

Survey	Period	Patients, n	Women, n (%)	Age, y, Mean ± SD
EUROASPIRE III	2007-2008	1985	1194 (60)	58 ± 10
EUROASPIRE IV	2014-2015	1842	1002 (54)	59 ± 12

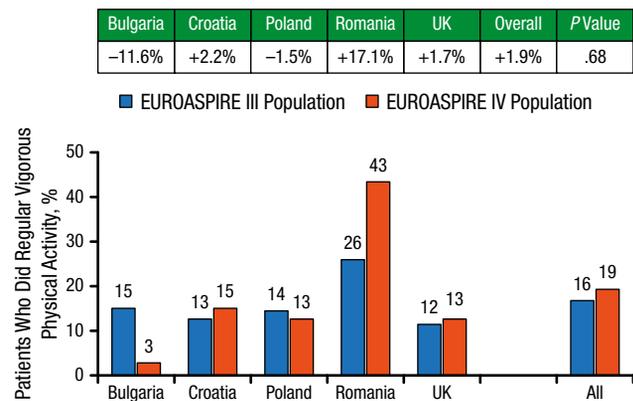
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Figure 1. Prevalence of Overweight



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Figure 2. Prevalence of Regular Vigorous Physical Activity<sup>a</sup>



<sup>a</sup>Vigorous physical activity defined as physical activity outdoors for ≥20 min ≥3 times a week.  
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## VISION Findings: Preoperative Statin Use Linked With Lower 30-Day Risk of Major Cardiovascular Events

Written by Brian Hoyle

Data from the prospective, international, cohort VISION study [Berwanger O et al. *Eur Heart J.* 2015] of patients

undergoing noncardiac surgery have indicated the value of preoperative statin use to lessen cardiovascular (CV) complications, according to Otavio Berwanger, MD, Research Institute-Cardiac Hospital, São Paulo, Brazil.

Of the estimated 200 million adults worldwide who receive noncardiac surgery every year, ≥10 million experience CV complications within 30 days. Observational data and findings of small randomized controlled trials have implicated statin use before surgery in the reduced risk of such CV events. More robust data are needed, and the paucity of data was the impetus for the VISION study.

VISION was a 12-center, 8-country observational study. Consecutive patients ≥45 years old undergoing noncardiac surgery at the participating centers were enrolled. The total enrollment of over 40 000 yielded a cohort that was a representative sample of patients undergoing noncardiac surgery. Early findings from the first 15 478 patients linked postoperative elevated troponin with 30-day mortality in the patient population [Devereaux PJ et al. *JAMA* 2012].

Data from 7337 patients—2845 who received statin preoperatively and 4492 who did not—were presented. Baseline characteristics between the 2 groups were similar in the propensity-matched population, with the exception of slightly higher prevalence of coronary artery disease, peripheral vascular disease, diabetes, and the preoperative use of aspirin and angiotensin-converting enzyme/angiotensin II receptor blocker inhibitors among statin users.

The prevalence of urgent (2.2%), emergent (8%), orthopedic (about 26%), and low-risk (36%) surgery was similar between the 2 groups.

The primary outcome was all-cause mortality, myocardial injury after noncardiac surgery, or stroke at 30 days. Secondary outcomes included peak troponin related to myocardial ischemia, myocardial infarction, CV and non-CV death, and stroke. Subgroup analyses assessed the effects of statin on CV events at 30 days.

After propensity matching, preoperative use of statin was associated with a significantly lower risk at 30 days of the primary outcome (RR, 0.83; 95% CI, 0.73 to 0.95;  $P=.007$ ). Secondary outcomes were also significantly lower with statin use, including all-cause mortality (RR, 0.58; 95% CI, 0.40 to 0.83;  $P=.003$ ) and cardiovascular mortality (RR, 0.42; 95% CI, 0.23 to 0.76;  $P=.004$ ).

The matched statin group had a lower risk of the primary outcome (RR, 0.82; 95% CI, 0.68 to 0.98). Survival at 30 days was also significantly greater in matched patients preoperatively treated with statins (HR, 0.57; 95% CI, 0.47 to 0.69;  $P=.004$ ). Subgroup analyses revealed a potential preferential benefit of preoperative statin use in 1973 patients with diabetes relative to 5364 patients