and 31% in women. In contrast, Wong et al,3 evaluating national data from Australia, reported an increase in age- and sex-adjusted incidence from 1993 to 2010 from 215 to 251 cases per 100 000 person-years.

Our Medicare population differs significantly from the US community-based sample evaluated by Yeh et al2 owing to higher proportions of older and female patients. Moreover, unlike other investigators studying Medicare patients (eg, Chen et al4 and Wang et al5), we determined the cumulative incidence of ACS, not just AMI, for nearly 2 decades. This study illustrates the disproportionate reduction in the incidence of unstable angina relative to AMI in the most recent decade. Our study is limited, however, by our use of administrative data, which are subject to appropriate coding, and our lack of clinical data.

In conclusion, the declining incidence of ACS from 2002 to 2009 demonstrates that improvement in cardiovascular outcomes extends to Medicare beneficiaries, probably reflecting better implementation of preventive strategies. This parallels a simultaneous reduction in US mortality rates associated with cardiovascular and coronary heart disease.6 However, our findings indicate that the AMI incidence among Medicare patients is higher than community-based estimates and has declined only modestly in nearly 2 decades, deserving additional attention. Importantly, the trend of declining ACS incidence was driven primarily by a reduction in unstable angina diagnoses, probably reflecting more frequent diagnosis of AMI relative to unstable angina due to expanded use of more sensitive cardiac biomarkers and changing definitions of AMI. These observations have important clinical and economic implications for this vulnerable patient population.

Gautam R. Shroff, MBBS
Brooke M. Heubner, MS
Charles A. Herzog, MD

Author Affiliations: Division of Cardiology, Department of Medicine, Hennepin County Medical Center and University of Minnesota, Minneapolis (Shroff, Herzog); Chronic Disease Research Group, Minneapolis Medical Research Foundation, Minneapolis, Minnesota (Heubner, Herzog).

Corresponding Author: Charles A. Herzog, MD, Chronic Disease Research Group, Minneapolis Medical Research Foundation, 914 5th Ave E, Ste 520, Minneapolis, MN 55404 (cherzog@cdrg.org).


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Study concept and design: Herzog.

Acquisition, analysis, or interpretation of data: All authors.

Drafting of the manuscript: Shroff.

Critical revision of the manuscript for important intellectual content: All authors.

Statistical analysis: Heubner.

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Study supervision: Herzog.

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Baseline Adherence to the Mediterranean Diet and Major Cardiovascular Events: Prevención con Dieta Mediterránea Trial

Lifestyle modification, particularly dietary changes, is the cornerstone of population-based strategies for cardiovascular disease (CVD) prevention.1 Recently the Prevención con Dieta Mediterránea (PREDIMED) study,2 a 5-year randomized primary prevention trial (isrctn.org Identifier: ISRCTN35799639), showed a 30% reduction in incident CVD with Mediterranean diet (MeDiet) intervention in comparison with a control diet. At quarterly visits throughout the study, a validated 14-item MeDiet screening tool (Table 1) was used to assess conformity with this dietary pattern.3

Close monitoring of adherence to dietary instructions for CVD prevention is difficult in the clinical setting. Short dietary assessment tools, such as the PREDIMED screener, are desirable to identify individuals in need of dietary counseling. Given that there is little information on the association of diet scores with disease outcomes in longitudinal studies, we investigated whether the baseline 14-point MeDiet score was related to incident CVD in the PREDIMED cohort.

Methods | Design. The PREDIMED study is a large randomized trial testing the effect of 2 MeDiets (supplemented with either extra-virgin olive oil or nuts) compared with a control diet (advice on a low-fat diet) on incident CVD in individuals at high risk for but no CVD diagnosed at enrollment. The trial’s design, objectives, and methods have been described.2 Participants included 7447 men and women (mean age, 67 years) with either diabetes mellitus or 3 or more cardiovascular risk factors. The primary end point was an aggregate of myocardial infarction, stroke, or cardiovascular death. This study was approved by the institutional review board of Hospital Clinic, Barcelona, Spain. Written informed consent was obtained from all participants.
Statistical Analysis. General linear modeling procedures were used to compare baseline characteristics of participants by score categories of the 14-point MeDiet screener. Multiple-adjusted Cox proportional hazards regression models were fitted to assess the association between the MeDiet score (or each component) and the major end point. We also generated a weighted MeDiet score to determine whether weighting each score's item modified the magnitude of the hazard ratios for the association with the outcome.

Results During a median follow-up of 4.8 years totaling 31 979 person-years, 288 participants sustained CVD events (139 strokes, 106 myocardial infarctions, and 87 cardiovascular deaths). A 2-point increase in unweighted and weighted scores was associated with 21% and 25% reductions in CVD events, respectively, in fully adjusted models (Table 2). Associations between MeDiet scores and CVD were weaker in women and in the control group, but were strengthened by using weighted scores. The proportional hazards assumption was tested (un-
Discussion | As assessed by a short 14-item screener, baseline adherence to the MeDiet in the PREDIMED trial showed an inverse association with incident CVD, independent of lifestyle and classical risk factors. Our findings further document the beneficial effect of the MeDiet on CVD in the PREDIMED trial and support the 14-item MeDiet screener as a useful tool to identify individuals needing dietary counseling. It is not surprising that the overall score showed an inverse association with CVD and that most individual score components did not show an inverse association. The combination of foods in an overall healthy dietary pattern is likely to provide stronger protection because this approach captures potential interactions and synergies between different foods and nutrients, reflecting the effect of the whole diet.4 In the present study, a 2-point increase in the 14-point MeDiet score was associated with a 21% reduction in CVD risk. Weighting the strength of each score component increased the magnitude of the association. The extent of the MeDiet’s protective effect estimated by the screener was similar or greater than that reported for MeDiet scores derived from complex, time-consuming food frequency questionnaires.5,6 This screener is thus a useful, simple tool to identify and educate individuals who would benefit most from dietary intervention to reduce future CVD risk.

Helmut Schröder, PhD
Jordi Salas-Salavador, MD, PhD
Miguel Angel Martínez-González, MD, PhD
Montserrat Fito, MD, PhD
Dolores Corella, DPharm, PhD
Ramón Estruch, MD, PhD
Emilio Ros, MD, PhD

Critical revision of the manuscript for important intellectual content: Salas-Salavador, Martínez-González, Fito, Corella, Estruch, Ros.
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