



FOUR-YEAR (2009-2013) ALL CAUSE AND CARDIOVASCULAR DISEASE MORTALITY AND ITS DETERMINANTS: THE IKARIA STUDY

Poster Contributions

Hall C

Sunday, March 30, 2014, 9:45 a.m.-10:30 a.m.

Session Title: Prevention: Familial Hypercholesterolemia, Novel Therapies and Cardiovascular Risk

Abstract Category: 20. Prevention: Clinical

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Authors: *Christine Chrysohoou, Christos Pitsavos, Demosthenes Panagiotakos, George Lazaros, Kalliope Katte, Michel Poulain, Dan Buettner, Christodoulos I. Stefanadis, 1st Cardiology Clinic University of Athens Greece, Athens, Greece, National Geographic, Washington, WA, USA*

Background: Ikaria Island, Greece, has joined a National Geographic project, the “Blues Zones”, which includes places with enormous high life expectancy, and, interestingly, common lifestyles and behaviors. This work examined risk factors in relation to 4-years (2009-2013) all cause and cardiovascular disease events, in the Ikaria Study elderly participants.

Methods: From June to October of 2009, 330 men and 343 women, aged 65 to 100 years, permanent inhabitants of the Island, were enrolled; in June-July 2013 were re-evaluated. Multivariable analysis, using the proportional hazards Cox model with all cause, cardiovascular disease death, or non-fatal events, as end points, and various characteristics, as predictors, were fitted.

Results: age-standardized gender-specific CVD incidence was 520 cases per 10,000 men inhabitants and 320 cases per 10,000 women, representing 21% of causes of death; which was lower as compared with the general population rates of country, as well as the European average. Other causes of death were: cancer (21%), infection (10%), respiratory (3%) and the rest 26% other causes (e.g., accidents, etc). Increased age, male gender (HR 2.85, 95%CI 1.75, 7.55), heart rate (1.02, 95%CI 1.01, 1.05), urea levels (1.02, 95%CI 1.01, 1.04), left atrial volume (1.09, 95%CI 1.008, 1.031), left ventricular hypertrophy (1.947, 95%CI 1, 3.922), RDW (1.078, 95%CI 1.013, 1.148), thyroid stimulating hormone (1.06, 95%CI 1.006, 1.11), and depression (1.076, 95%CI 0.99, 1.17) were positively associated with mortality. Additionally, coffee (0.99, 95%CI 0.99, 1.00), tea consumption (0.992, 95%CI 0.985, 0.998), fruit intake (0.995, 95%CI 0.991, 0.999), olive oil (0.97, 95%CI 0.951, 0.989) and left ventricular ejection fraction (0.932, 95%CI 0.895, 0.97) were inversely associated with CVD risk.

Conclusion: This work revealed a pattern of risk factors associated with CVD risk in a particular group of elderly individuals among the highest longevity rates in the world. Interestingly, common CVD factors were not associated with; whereas other biological and nutritional factors were placed in the aetio-pathological puzzle of CVD incidence in the IKARIA elderly study.