EFFECTS OF INVITATION TO PARTICIPATE IN HEALTH SURVEYS ON THE INCIDENCE OF CARDIOVASCULAR DISEASE: A RANDOMISED GENERAL POPULATION STUDY

Tea Skaaby
*aResearch Centre for Prevention and Health, Denmark

Statement of the Problem: The effects of health checks on reducing cardiovascular disease morbidity and mortality in the general population have been questioned. There are few randomized studies with long-term follow-up. We used a cohort randomly selected from a general population as a randomized trial to study the effect of repeated general health checks on the 30-year incidence of ischaemic heart disease (IHD), stroke and all-cause mortality.

Methodology & Theoretical Orientation: The study included all persons (n = 17,845) aged 30, 40, 50 and 60 years living in 11 municipalities in Copenhagen, the capital of Denmark. An age- and gender-stratified random sample (n = 4789) was invited to up to three health checks, from 1982 to 1994 (intervention group). The remaining 12,994 persons were defined as the control group. Complete follow-up on mortality, emigration and fatal and non-fatal IHD and stroke until 31 December 2012 was obtained by linkage to registries.

Findings: There were 3290 and 2190 incident cases of IHD and stroke, respectively, and a total of 6432 deaths during follow-up (mean = 25.2 years). The hazard ratios (HRs) (95% confidence intervals, CIs) for persons in the intervention group versus persons in the control group were as follows: IHD (HR: 0.99, 95% CI: 0.92, 1.07), stroke (HR: 1.14, 95% CI: 1.04, 1.25) and all-cause mortality (HR: 1.03, 95% CI: 0.98, 1.09).

Conclusion & Significance: Repeated general health checks offered to the general population had no beneficial effects on the development of IHD, stroke or all-cause mortality during 30 years of follow-up. An increased incidence of stroke was observed in the group offered health checks.

Biography
Tea Skaaby is an experienced Researcher in epidemiological, population-based preventive medicine. Her scientific focus areas are micronutrient deficiencies and other risk factors for chronic diseases including cardiovascular disease and cancer. The current study is part of a series of studies intended to investigate whether repeated health examinations with screening of various risk factors in an unselected population can prevent long-term incidence of ischemic heart disease, stroke, diabetes and mortality etc.

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