



Limited evidence for benefits of health promotion interventions for coronary heart disease

Clinical question

How effective are multiple risk factor interventions for primary prevention of coronary heart disease (CHD) in adults assumed to be without prior clinical evidence of CHD?

Bottom line

Multiple risk factor interventions resulted in small reductions in risk factors, including blood pressure, cholesterol and smoking. Contrary to expectations, multiple risk factor interventions had little or no impact on the risk of CHD mortality or morbidity. This could be because these small risk factor changes were not maintained in the long term. Alternatively, the small reductions in risk factors may have been caused by bias in some of the studies. Interventions included workshops, lectures, individual sessions, personal counselling, provision of written material, assignments, shopping tours and cooking sessions. Some studies required family members, partners or both to participate in the intervention. The median duration of follow-up was 12 months (with a range of 6 months to 12 years).

Caveat

Marked heterogeneity for all risk factor analyses was not explained by comorbidities, allocation concealment, use of antihypertensive or cholesterol-lowering drugs, or by age of trial.

Context

In many countries, there is enthusiasm for “healthy heart programmes” that use counselling and educational methods to encourage people to reduce their risk of developing heart disease. The risk factors targeted in such interventions include high cholesterol, excessive salt intake, high blood pressure, excess weight, a high-fat diet, smoking, diabetes and a sedentary lifestyle.

Cochrane Systematic Review

Ebrahim S. Multiple risk factor interventions for primary prevention of coronary heart disease. Cochrane Reviews, 2011, Issue 1. Article No. CD001561. DOI: 10.1002/14651858.CD001561.pub3. *This review contains 55 studies involving 163,471 participants.*

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