

Title of Intervention: Nurse-led secondary prevention clinics for heart disease in primary care

Intervention Strategies: Individual Education, Supportive Relationships

Purpose of the Intervention: To improve secondary prevention in patients with coronary heart disease.

Population: Coronary heart disease patients

Setting: General practice clinics in rural and urban Scotland; health care facility-based

Partners: Health care facilities

Intervention Description:

- Individual Education: Participants received a tailored form with feedback, goal planning and an action plan. "One Step at a Time" leaflets were given to aid in dietary modifications.
- Supportive Relationships: "Stepping Out" walking programs were held to promote physical activity. Participants visited nurse-run clinics in general practices every two to six months. One-on-one nurse counseling was done for all risk factors.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Trained nurses to run clinics, physicians for referral, dietitians
- Training: Training in clinic protocols and techniques to facilitate behavioral change was provided during a 1-day session before intervention and a half day during the intervention year
- Technology: Computer
- Space: Clinic space
- Budget: Not mentioned
- Intervention: Dietary modifications brochure, take home recommendation forms, clinic protocol manual, clinic record cards, telephones for clinic
- Evaluation: Telephones and postage for communication, Short Form-36 health survey questionnaire, chest pain by the Angina TyPE specification, hospital anxiety and depression scale

Evaluation:

- Design: Randomized trial
- Methods and Measures:
 - Mortality tracked through review of medical case notes and national data sets
 - Short Form-36 health survey questionnaire assessed physical and social functional status, wellbeing (mental health, energy, fatigue, pain) and general health perception
 - Chest pain was measured by the Angina TyPE specification
 - Anxiety and depression were measured by the hospital anxiety and depression scale
 - Blood pressure and blood lipids were also measured
 - Cost per quality of adjusted life year was calculated through Kaplan-Meier survival curves.

Outcomes:

- Short Term Impact: After one year, the intervention group scored significantly better in five out of eight domains on the Short Form-36 health survey questionnaire. At four years, the intervention group scored higher than controls in all domains, but differences were no longer significant. After one year, significantly fewer of the intervention group reported worsening chest pain. At four years, there were no significant differences in reported chest pain, worsening chest pain anxiety or depression. Longer exposure to clinics was associated with improved secondary prevention for aspirin use, blood pressure and lipid management and exercise. Diet and smoking status did not vary with length of exposure.
- Long Term Impact: Cumulative death rates were lower for the intervention group compared to the control group.

Maintenance: Not mentioned

Lessons Learned: Nurse-led secondary prevention clinics for coronary heart disease seem to be cost-effective compared with most interventions in health care. Improved medical and lifestyle components of secondary prevention produced by nurse-led clinics seem to lead to fewer total deaths and coronary events. Medical treatment was easier to change than lifestyle. The estimated cost effectiveness is much better for secondary prevention than for primary prevention.

Citation(s):

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