The benefits of nurse led secondary prevention clinics for coronary heart disease continued after 4 years


QUESTION: In patients with pre-existing coronary heart disease (CHD), do the benefits of nurse led secondary prevention clinics continue beyond 1 year?

Design
Randomised [allocation concealed]*, unblinded*, controlled trial with mean follow up of 4.7 years.

Setting
19 randomly selected general practices in Scotland, UK.

Patients
1343 patients (mean age 66 y, 58% men) who had CHD. Exclusion criteria were terminal illness, dementia, and inability to leave home; 82% of patients were followed up.

Intervention
673 patients were allocated to receive invitations to attend secondary prevention clinics at their general practice where nurses reviewed symptoms and treatments, promoted aspirin use, reviewed blood pressure and lipid management, assessed lifestyle factors, and negotiated any necessary behavioural changes. 670 patients were allocated to usual care. The intervention ended after 1 year, individual results were sent to the general practices, and patients in both groups were allowed to attend secondary prevention clinics if their general practitioners continued to offer them.

Main outcome measures
Use of secondary prevention (only blood pressure management and lipid management had >80% follow up), total mortality, and coronary event rates (coronary death or non-fatal myocardial infarction).

Main results
Analysis was by intention to treat. Patients in the intervention group maintained the same level of secondary prevention use at 4 years, except for exercise. After the initial trial, increased use of secondary prevention in the control group resulted in no differences between the treatment and control groups at 1 year. 670 patients were allocated to usual care. The intervention ended after 1 year, individual results were sent to the general practices, and patients in both groups were allowed to attend secondary prevention clinics if their general practitioners continued to offer them.

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Conclusion
Nurse led secondary prevention clinics maintained secondary prevention use after 4 years, and the decreased mortality and coronary event rates seen in the first year remained at 4 years.

Nurse led secondary prevention clinics v control in coronary heart disease†

<table>
<thead>
<tr>
<th>Outcomes at mean 4.7 years</th>
<th>Nurse led clinics</th>
<th>Control (66% CI)</th>
<th>Adjusted RRR (95% CI)</th>
<th>NNT (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total mortality</td>
<td>15%</td>
<td>19%</td>
<td>25% (2 to 42)</td>
<td>22 (13 to 265)</td>
</tr>
<tr>
<td>Coronary events‡</td>
<td>14%</td>
<td>18%</td>
<td>24% (0 to 42)</td>
<td>Borderline significance</td>
</tr>
</tbody>
</table>

†Abbreviations defined in glossary; RRR, NNT, and CI calculated from data in article.
‡Adjusted for age, general practice, sex, and baseline secondary prevention.
§Coronary death or non-fatal myocardial infarction.

The benefits of nurse led secondary prevention clinics for coronary heart disease continued after 4 years. The intervention was effective and sustainable, with no differences between the nurse-led clinic group and the control group at 4 years. The long-term effectiveness of nurse-led secondary prevention clinics provides further evidence of their efficacy in reducing coronary events and improving patient outcomes. The findings support the implementation of such clinics in other settings to improve patient care and reduce coronary events.


*Abbreviations defined in glossary; RRR, NNT, and CI calculated from data in article.
†Adjusted for age, general practice, sex, and baseline secondary prevention.
‡Coronary death or non-fatal myocardial infarction.