Self management with the Angina Plan reduced anxiety, depression, angina attacks, and use of medication


QUESTION: In patients with newly diagnosed angina, does self management using the Angina Plan introduced by a practice nurse improve psychological outcomes more than an educational programme delivered by a nurse?

Design
Randomised (allocation concealed*), blinded (patients† and data collectors)*, controlled trial with 6 months of follow up.

Setting
20 general practices in York, UK.

The Angina Plan (AP) v educational sessions for newly diagnosed angina at 6 months†

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Mean change in score from baseline</th>
<th>Angina Plan</th>
<th>Educational sessions</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD Scale anxiety</td>
<td>−1.03</td>
<td>0.00</td>
<td>0.052</td>
<td></td>
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<tr>
<td>HAD Scale depression</td>
<td>−0.48</td>
<td>0.41</td>
<td>0.013</td>
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<tr>
<td>Angina attacks per week</td>
<td>−2.98</td>
<td>−0.41</td>
<td>0.016</td>
<td></td>
</tr>
<tr>
<td>Number of GTN per week</td>
<td>−4.19</td>
<td>0.59</td>
<td>0.018</td>
<td></td>
</tr>
<tr>
<td>SAQ physical limitation</td>
<td>8.42</td>
<td>−1.43</td>
<td>&lt;0.001</td>
<td></td>
</tr>
</tbody>
</table>

GTN = glyceryl trinitrate (pills or puffs); HAD = Hospital Anxiety and Depression (0–21 [severe]); SAQ = Seattle Angina Questionnaire (1–100 [better functioning]). All mean score changes favour the Angina Plan and are adjusted for covariates.

Patients
142 patients (mean age 67 y, 60% men) who had been diagnosed with angina in the previous 12 months. Exclusion criteria were angina for > 12 months, a life threatening illness, dementia, or mental confusion. Follow up was 91%.

Intervention
Patients were allocated to a self help manual (the Angina Plan) (n=68) or educational sessions with additional booklets (n=74). The Angina Plan consisted of a 70 page, patient held workbook and a 20 minute audio-taped relaxation programme, which were given to the patient and, when possible, partner during a 30–40 minute structured interview by a nurse. Nurses were also instructed to identify any of the patient’s misconceptions about angina and to correct these with accurate information. Educational sessions consisted of the identification of risk factors for coronary heart disease by a nurse, a discussion about how to reduce them, and an information package.

Main outcome measures
Anxiety and depression (Hospital Anxiety and Depression Scale, 0–21 [severe] points). Secondary outcomes included number, severity, and duration of angina episodes (angina diary); number of short acting glyceryl trinitrate (GTN) pills or puffs of sublingual spray (angina diary); and quality of life (Seattle Angina Questionnaire [SAQ], 1–100 [better functioning] points).

Main results
Analysis was by intention to treat. Patients in the Angina Plan group had greater reductions in anxiety (borderline significance) and depression (p=0.013), fewer angina attacks weekly (p=0.016), less use of GTN (p=0.018), and greater improvement on the physical limitation component of the SAQ (p<0.001) than patients in the educational session group (table). Treatment groups did not differ for the SAQ components of anginal stability, angina frequency, treatment satisfaction, or disease perception, or for severity or duration of angina attacks.

Conclusion
In patients with newly diagnosed angina, self management with the Angina Plan reduced anxiety and depression, the frequency of angina attacks, and the use of medication.

*See glossary.
†Information provided by author.

COMMENTARY
Angina affects 7.7% of the population over the age of 65. Advances in secondary prevention of coronary heart disease with drug treatment and increasing use of coronary revascularisation have overshadowed other methods of managing angina patients. Anxiety, depression, and reduced quality of life are associated with angina and predict poor outcomes independently of coronary angiographic findings. Moreover, the disability arising from angina is not a simple function of the degree of myocardial ischaemia: patients with relatively mild ischaemia can be severely disabled by their symptoms. Pharmacological and surgical methods do not address these problems. Cognitive behavioural techniques have been used successfully to manage symptoms from a wide range of chronic conditions. Previous studies have shown that these techniques, applied in the context of a home based self help rehabilitation programme after a coronary event, can improve psychological morbidity and reduce health service use.

The study by Levin et al targets patients recently diagnosed with angina in primary care. A relatively short consultation with a specially trained nurse, provision of written material, and a relaxation tape followed by periodic telephone follow up, is a feasible intervention for internal medicine, family, or general practices. This study is small and material, and a relaxation tape followed by periodic telephone follow up, is a feasible