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. However, adjusted analyses suggest that patients attending the nurse run clinics had significantly better survival and fewer coronary events after approximately 5 years, with the suggestion that longer participation in the clinics yielded the best outcomes.

The effectiveness of nurse run clinics in reducing short term cardiovascular risk has been previously established.1,2 The maintenance of these improvements over the long term encourages further development of such programmes. However, the absence of discussion around a theoretical model for the nursing intervention might hinder the study’s replication in other settings. The transtheoretical model is effective for many health behaviours and may add benefits here, as may the use of process evaluation.3–4 Secondary prevention with respect to appropriate medication use (aspirin, antihypertensives, and lipid lowering agents) has clear benefits, and nurses can improve patient compliance with such regimens by helping patients tailor regimens to their unique circumstances. The findings of Murchie et al suggest that, firstly, more research is necessary to determine ways in which nursing might contribute to equally impressive improvements in diet and exercise behaviour as were found for use of pharmacological treatments. Secondly, by studying effective practice models to guide nursing, results such as these may be more widely applied.

Marilyn Frenn, RN, PhD
Associate Professor
Marquette University
College of Nursing
Milwaukee
Wisconsin, USA

COMMENTARY
Murchie et al appear to confirm the long term effectiveness of nurse run clinics for increasing secondary prevention in primary care settings. The use of the clinics by control patients after completion of the first trial meant that the initial difference between the treatment and control groups at 1 year disappeared. However, adjusted analyses suggest that patients attending the nurse run clinics had significantly better survival and fewer coronary events after approximately 5 years, with the suggestion that longer participation in the clinics yielded the best outcomes.

The effectiveness of nurse run clinics in reducing short term cardiovascular risk has been previously established.1,2 The maintenance of these improvements over the long term encourages further development of such programmes. However, the absence of discussion around a theoretical model for the nursing intervention might hinder the study’s replication in other settings. The transtheoretical model is effective for many health behaviours and may add benefits here, as may the use of process evaluation.3–4 Secondary prevention with respect to appropriate medication use (aspirin, antihypertensives, and lipid lowering agents) has clear benefits, and nurses can improve patient compliance with such regimens by helping patients tailor regimens to their unique circumstances. The findings of Murchie et al suggest that, firstly, more research is necessary to determine ways in which nursing might contribute to equally impressive improvements in diet and exercise behaviour as were found for use of pharmacological treatments. Secondly, by studying effective practice models to guide nursing, results such as these may be more widely applied.

Marilyn Frenn, RN, PhD
Associate Professor
Marquette University
College of Nursing
Milwaukee
Wisconsin, USA

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

_Evid Based Nurs_ 2003 6: 123
doi: 10.1136/ebn.6.4.123

Updated information and services can be found at:
_http://ebn.bmj.com/content/6/4/123_

These include:

**References**
This article cites 5 articles, 2 of which you can access for free at:
_http://ebn.bmj.com/content/6/4/123#BIBL_

**Email alerting service**
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Topic Collections**
Articles on similar topics can be found in the following collections

- Drugs: cardiovascular system (269)
- Ischaemic heart disease (115)
- General practice / family medicine (262)
- Hypertension (220)
- Dementia (96)
- Memory disorders (psychiatry) (124)

**Notes**