Review: self help interventions alone minimally increase smoking cessation rates

Question

How effective are self help smoking cessation interventions?

Data sources

Studies were identified by searching the Tobacco Addiction Review Group Register (which includes studies identified from Medline, PsycLIT, Dissertation Abstracts Online, Applied Social Sciences Index and Abstracts, Social Citations Index, and Social Science Citations Index) using the terms self help, manual, and booklet; and bibliographies of previous reviews.

Study selection

Randomised or quasi-randomised controlled trials were selected if they had ≥6 months follow up and if ≥1 treatment arm involved a self help intervention without repeated face to face contact with a therapist. Self help interventions had to involve a structured programme for quitting. Studies of pregnant women were excluded.

Data extraction

Data were extracted on the study population, method of randomisation, type of intervention, follow up, and validation of self reported cessation.

Main results

Meta-analysis of 10 trials of self help compared with no self help found no differences for smoking cessation at longest follow up (p = 0.06) (table). When 3 trials in which the control group received some form of leaflet were excluded from the analysis, the self help group had slightly higher cessation rates (p < 0.04) (table). Adding self help to advice or to nicotine replacement therapy did not increase smoking cessation. Several studies assessed enhancements to self help interventions. Meta-analysis of 6 studies showed that personalised self help materials increased smoking cessation compared with standard materials (6.2% v 4.3%, relative benefit increase [RBI] 49%, 95% CI 12 to 98, number needed to treat [NNT] 53, CI 33 to 147). Meta-analysis of 6 studies showed that self help materials with telephone follow up increased smoking cessation (11.4% v 7.9%, RBI 55%, CI 30 to 85, NNT 29, CI 20 to 50).

Conclusions

Self help interventions alone minimally increase smoking cessation rates. Self help materials added to nicotine replacement therapy or to advice do not confer additional benefits. Self help interventions that are personalised to individual smokers or are supplemented with telephone follow up improve smoking cessation.

Self help v no self help for smoking cessation at longest follow up* (range 6–24 mo)

| Intervention | Weighted event rates | | RBI (95% CI) | NNT (CI) |
	Self help	No self help		
Self help	5.1%	4.5%	8% (−8 to 27)	Not significant
Self help with no leaflet	4.3%	3.5%	27% (2 to 58)	123 (64 to 1771)

* Abbreviations defined in glossary; RBI, CI, and NNT calculated from data in article.

Commentary

Smoking kills about 3 million adults worldwide each year.[1] Although most people stop smoking on their own, various self help materials have been developed to facilitate this process. The article by Lancaster and Stead provides a summary of current research on the effectiveness of self help materials, which they define as those that provide structured approaches to smoking cessation. Their finding that self help materials alone have a minimal effect on smoking cessation is consistent with previous reviews.[2]

The effectiveness of self help methods is usually measured by looking at cessation rates ≥6 months after the intervention. Cessation rates are one indicator of intervention success; in "stage based" approaches to cessation, however, movement through stages may be a more accurate measure of success. Using the transtheoretical, or "stages of change" model,[3] people are characterised as being in precontemplation, contemplation, or action phases of smoking cessation. Action oriented materials are unlikely to be effective for people in precontemplation or contemplation stages. Tailoring materials to an individual's readiness for change is believed to be more effective. More research is needed on the effectiveness of stage based self help materials in moving individuals through the stages of smoking cessation.

Although this review looked at a variety of self help resources (eg, written and video), research is needed to evaluate the effectiveness of self help programmes available on the internet, particularly stage based, self help programmes that provide personalised interventions for smokers.

Based on the results of this review, nurses working with people who want to stop smoking might consider (1) tailoring materials for clients based on their smoking habits and motivations rather than on the perceived needs of a broadly defined group of smokers; and (2) increasing the intensity of an intervention by providing telephone counselling.

Lynn Martin, RN, MScN
Tobacco Use Prevention Promoter
Regional Municipality of
Hamilton-Wentworth
Social and Public Health Services Division
Hamilton, Ontario, Canada

1 World Health Organisation. *Executive summary.* Geneva: WHO, 1995.
2 Curry SJ. Self-help interventions for smoking cessation. *J Consult Clin Psychol* 1993;**61**:790–803.
3 Prochaska JO, Velicer WF. The transtheoretical model of health behavior change. *Am J Health Promot* 1997;**12**:38–48.