

A comprehensive smoking cessation programme after surgery increased 1 year quit rates

Simon JA, Solkowitz SN, Carmody TP, et al. *Smoking cessation after surgery. A randomised trial. Arch Intern Med* 1997 Jun 23;157:1371-6.

Objective

To determine whether a multicomponent smoking cessation programme given to adults in hospital for non-cardiac surgery will increase long term quit rates.

Design

Randomised controlled trial with 12 month follow up.

Setting

A Veterans Affairs hospital in California, USA.

Patients

324 adults (mean age 54 y, 68% white, 98% men) in hospital for a minimum of 2 days for non-cardiac surgery. Adults were included if they smoked (defined as any amount of tobacco used within 2 wks of hospital admission) and were ready to quit smoking (in the contemplation or action stage of quitting described in the Stages of Change Theory). Exclusion criteria were terminal illness and contraindications to nicotine replacement therapy. The intention to treat analysis included the 299 adults who were alive at study end.

Intervention

Interventions were given on the weekday closest to the projected hospital discharge date. 168 adults were allocated to an intervention that was administered by a public health educator. The individualised programme lasted 30-60 minutes and included viewing a 10 minute videotape and counselling on the risks of smoking and benefits of quitting; assessment of and countermeasures to barriers to quit smoking; self management

techniques to overcome potential difficulties; assessment and referral for depression; and a 3 month prescription and instructions on the use of nicotine gum or patch. 5 follow up telephone calls were also made over 3 months. 156 patients were allocated to a control group and received a 10 minute counselling session on the risks of smoking and benefits of quitting.

Main outcome measures

Self reported and laboratory confirmed quit rates using serum or saliva samples for cotinine testing. The 28 adults who were lost to follow up were considered to have continued smoking.

Main results

Adults who received the comprehensive smoking cessation programme compared with adults who received the 10 minute counselling session had a higher self reported quit rate at 12 months (27% v 13%, $p < 0.01$) and a higher laboratory confirmed quit rate (15% v 8%, $p = 0.04$). The groups did not differ for number of quit attempts per person (6.0 v 6.8, $p = 0.24$), mean number of clinic visits (16 v 12, $p = 0.07$), hospital readmission ($p = 0.9$), or mortality (7% v 9%, $p = 0.41$).

Conclusion

A comprehensive smoking cessation programme of counselling, education, and nicotine replacement therapy for patients in hospital for non-cardiac surgery increased self reported and laboratory confirmed 1 year quit rates.

Source of funding: in part, the California Tobacco-Related Disease Research Program, Oakland.

For article reprint: Dr J A Simon, General Internal Medicine Section (111A1), Veterans Affairs Medical Center, 4150 Clement Street, San Francisco, CA, 94121 USA. Fax +1 415 386 4044.

Commentary

Smoking cessation has been studied among patients who have had cancer and cardiac problems, but this trial by Simon *et al* is unusual in that patients who had non-cardiac surgery were studied.

The enforced abstinence from smoking after surgery was identified as the starting point from which to initiate and maintain cessation. The study population, although large, was limited because only 2% were women, and the youngest patients who smoked were 25 years old. All participants were treated in the same hospital. However, the intervention and control groups were remarkably similar for baseline characteristics. Because the intervention group received several approaches to smoking cessation, it is not possible to extrapolate which of them may be the

most successful. Other studies have also shown the efficacy of a multicomponent cessation programme.¹

A strength of this study is the validation of smoking cessation through serum or saliva cotinine concentrations. Indeed, a substantial proportion of people who reported having given up smoking had provided inaccurate information regarding their smoking status. Although the laboratory confirmed that the quit rate at 1 year in the multiple intervention group was modest, it was none the less double that of the counselling only group. The individual approach, using several interventions, is labour intensive, costly, and time consuming. The study, however, provides direction for public health nurses, clinical nurse specialists, counsel-

lors, and other health workers who are concerned about helping patients to stop smoking and maintain abstinence. Although this study does not address the question of cost effectiveness, other studies suggest that intensive efforts such as these are cost effective among men and women.²

Nicola Todd, RGN, MSc
Cardiac Nurse Specialist
North Middlesex Hospital,
London, UK

1 Ockene J, Kristeller JL, Goldberg R, et al. Smoking cessation and severity of disease: the Coronary Artery Smoking Intervention Study. *Health Psychol* 1992;11:119-26.

2 Cummings SR, Rubin SM, Oster G. The cost-effectiveness of counselling smokers to quit. *JAMA* 1989;261:75-9.



A comprehensive smoking cessation programme after surgery increased 1 year quit rates

Evid Based Nurs 1998 1: 46
doi: 10.1136/ebn.1.2.46

Updated information and services can be found at:
<http://ebn.bmj.com/content/1/2/46>

| | |
|-------------------------------|--|
| | <i>These include:</i> |
| References | This article cites 3 articles, 0 of which you can access for free at: http://ebn.bmj.com/content/1/2/46#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 Health education (333) Smoking (162) Tobacco use (163) Smoking cessation (61) |
|--------------------------|--|

Notes

To request permissions go to:
<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:
<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:
<http://group.bmj.com/subscribe/>