

# INTERVENTIONS FOR SMOKERS IN GENERAL PRACTICE

## Translating Theory and Research into Practice

Robyn Richmond and Colin Mendelsohn

School of Community Medicine  
University of New South Wales  
Sydney, Australia

### INTRODUCTION

This paper has two aims:

1. To present the process of research we have conducted in general practice and the results from the trials.
2. To describe the frameworks that have guided the development and implementation of the Smokescreen Programme: The Transtheoretical Model of Change, Motivational Interviewing and Diffusion Theory.

Over 15 years we have conducted four studies of smoking cessation interventions in general practice designed to answer the following research questions:

1. Does the intervention work in general practice under optimum controlled conditions? Efficacy trial: early 1980s.
2. Does the program work widely when used by many medical practitioners? Effectiveness trial: mid-late 1980s.
3. Is the intervention adopted and maintained over time by a wide range of GPs? Implementation study: late 80s-early 1990s.

### STUDY 1 - EFFICACY TRIAL

In general practice, 200 smokers were randomly allocated to either an intervention or control group. The intervention group received the Smokescreen Programme: a moderately brief, multicomponent, behavioural change programme of 6 visits over 6 months and nicotine gum. The control group received no intervention. Point prevalence abstinence figures at 3 years were 36% in the active group and 8% in the control group. (Abstinence was biochemically validated in all studies)

## STUDY 2 - EFFECTIVENESS TRIAL<sup>2</sup>

This was a field trial of 450 smokers, comparing the effectiveness of 3 different smoking cessation interventions in general practice. The first group received the Smokescreen Programme plus nicotine gum (n=200), the second group received the smokescreen programme and no gum and the third group was given only brief advice, nicotine gum and 2 follow up visits. Point prevalence rates at 12 months were 19%, 18% and 12% respectively.

## MAJOR FINDINGS

The results of these trials have been used to guide the development of the Smokescreen programme and the training programme for doctors.

1. The important role of the doctor. The studies validated the doctor's role in assisting smokers to quit. 65% of patients considered it was a part of the doctor's role to help smokers to quit.
2. Reduced cigarette consumption in continuing smokers. Quit attempts or short term reduced consumption represented some therapeutic impact - getting the patient ready for action and increasing the likelihood of future success.
3. Apparent compensation for reduced cigarette consumption by increased inhalation. The maintenance of blood levels of tobacco analytes provided support for the titration model of nicotine.
4. Weight gain following cessation. 75% of abstainers gained weight, 4.0 kg on average at 6 months<sup>3</sup>. Weight gain was a major reason for relapse in 22% of continuing smokers.
5. Nicotine gum provided only a transient benefit, and only during the treatment period. Heavy smokers gained less weight if they used nicotine gum.
6. Attendance at follow up. Patients who attended all follow-up visits were significantly more likely to be abstinent than partial attenders.
7. Personalising the health effects using test results. Lung function tests and blood concentrations of tobacco products were deciding motivators to stop smoking for abstainers compared to continuing smokers.

## STUDY 3 - IMPLEMENTATION STUDY<sup>4</sup>

Research emphasis in the late 80s and early 90s has now shifted to evaluating the range of ways of disseminating interventions in general practice. Study 3 looked at Implementation issues and examined, amongst other things, the role of workshop training and reinforcement feedback in GP use of the Smokescreen programme. Study 4 has looked at further implementation issues and is awaiting publication.

In Study 3, after a 2-hour training workshop, 168 GPs were allocated to either follow-up reinforcement contact or no contact groups. Follow-up consisted of a practice visit and 2 phone calls at 5 weeks and 3 months. Ongoing support produced greater utilisation of the programme by GPs (84%) at 6 months compared with no contact after the training workshop (52%).

## FRAMEWORKS THAT HAVE GUIDED THE DEVELOPMENT OF THE PROGRAMME

### 1) Transtheoretical Model of Change

This framework developed by Prochaska and DiClemente is a valuable model for assessing a person's readiness to stop smoking<sup>5</sup>. In the Smokescreen Programme we have tried to operationalise the model for doctors and present it in a simplified version.

Smokers in different stages of readiness have different needs and require different interventions. They are either **Ready** to quit (Preparation stage), **Unsure** (Contemplation) or **Not Ready** (Precontemplation). 3 different stage-matched interventions are available for each of these categories.

Smokers are allocated to groups by the use of the following non judgemental and non confrontational question: How do you feel about your smoking?

Not ready smokers (40%) are not thinking about quitting and may be resistant to even discuss it. A very brief intervention is provided: they are encouraged to think about their smoking, given a specific handout and invited back.

Unsure smokers (40%) are ambivalent and recognise both benefits and risks. The intervention consists of: 1. Motivational interviewing to weigh up the pros and cons and help to decide whether to continue to smoke or not (discussed later), and 2. A personalised discussion of the individual smoker's concerns about quitting and health effects of smoking, including lung function testing when indicated. A specific handout is provided and an invitation to return.

Ready smokers (20%) are committed and ready to make a quit attempt. A more intensive programme of advice and support to quit over several visits is provided. This consists of a menu of cognitive and behavioural strategies which can be tailored to individual needs and concerns. Nicotine replacement therapy is used if indicated and a specific handout is given.

Targetting each group with a specific intervention avoids wasted time on smokers not ready to quit and allows a maximum time to be spent on patients most likely to benefit. However, all smokers can be assisted. Success is not simply quitting, but rather helping the smoker move through the stages towards eventual abstinence.

The model of change can also be applied to general practitioners who have different levels of motivation to become involved in smoking cessation. For less motivated doctors we have available a Self Help Kit which consists of a display stand containing self help booklets which either the doctor hands out with a little advice or the patient takes from the waiting room.

### 2) Motivational Interviewing

This is a style of counselling for patients who are ambivalent or unsure about a behaviour<sup>6</sup>. It can assist them to explore their habit and their concerns about it and help them to weigh up the pros and cons of smoking. We have adapted the technique and incorporated it into the Smokescreen Programme.

First, the doctor elicits the patient's own thoughts about the good and bad aspects of the habit and selectively reflects them to the patient to encourage continued exploration and awareness of the habit. Then the doctor summarises and encourages the patient to look at the balance. This allows the patient to decide whether to change the behaviour.

A key principle of motivational interviewing is that the patient takes responsibility. The doctor simply acts as a facilitator. Patients are more likely to modify a behaviour if they

reach the decision to change based on their own reasoning. Confrontation creates resistance and denial and should be avoided.

### 3) Diffusion Theory

This is "The process by which the innovation is communicated through certain channels over time among members of a social system."<sup>7</sup> It has provided a framework for the dissemination of the Smokescreen Programme through the medical community in Australia. 4,000 GPs have been trained in the Programme throughout all parts of Australia.

There are four stages of diffusion:<sup>8</sup>

1. Dissemination. Providing information and raising GP awareness of the Smokescreen Programme, to increase GP motivation to learn it.
2. Adoption. The decision making step when the GP decides to attend the workshop.
3. Implementation. The effective use of the programme over time and its use as intended.
4. Maintenance. Moving the programme into daily medical practice long-term.

A number of strategies have been used to enhance each stage.

### SUMMARY

The development of the Smokescreen Programme has been guided by:

1. Research: our own 4 studies over 15 years and the research of others.
2. a. The transtheoretical model of change, which we have tried to operationalise for doctors.
- b. Motivational interviewing, designed for use with ambivalent smokers.
- c. Diffusion theory, guided the implementation in general practice and the encouraging of its continued use by GPs.

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