
## Behavioural support with pharmacotherapy for smoking cessation

A Cochrane review found that using high intensity behavioural support, such as more sophisticated interventions or more frequent sessions, with smokers who were using pharmacotherapy increased their likelihood of stopping smoking compared with less intense approaches.

**Overview:**

- People who receive pharmacotherapy to help them stop smoking should also receive some form of behavioural support, such as counselling, but the relative efficacy of different types, frequency and duration of support is unclear.
- A Cochrane review reported that providing high intensity behavioural support to people receiving pharmacotherapy was 10% to 25% more effective at helping them to stop smoking than low intensity support.
- Practitioners assisting smokers to quit should be trained in behaviour change techniques that support the use of smoking cessation pharmacotherapy.

**Background:** People who are trying to stop smoking may be offered behavioural support to help them quit. Behavioural approaches range from minimal interventions, such as written self-help materials (Hartmann-Boyce et al. 2014), to more involved approaches like individual face-to-face counselling (Lancaster and Stead 2008). Another option to help people stop smoking is offering pharmacotherapy, such as nicotine replacement products, varenicline or buproprion.

Providing behavioural support and pharmacotherapy together increases the likelihood that someone will stop smoking (Stead and Lancaster 2012). The intensity of the behavioural support, in terms of type of support or number of sessions, may also affect the success of this combined approach.

**Current advice:** The NICE guideline on smoking: brief interventions and referrals recommends that healthcare professionals should advise everyone who smokes to stop and refer people who want to stop smoking to an intensive support service, such as NHS stop smoking services. People who are unwilling or unable to accept this referral should be offered pharmacotherapy and additional support.

NICE guidance on stop smoking services may offer behavioural counselling, group behaviour therapy, pharmacotherapies, self-help materials, telephone counselling or a combination of treatments. People offered pharmacotherapies (nicotine replacement therapy, varenicline or bupropion) should also be offered advice, encouragement and support to help them attempt to quit. Varenicline should normally be prescribed only as part of a programme of behavioural support.

NICE is currently developing new guidance on smoking cessation interventions and services.

The NICE pathway on smoking brings together all related NICE guidance and associated products on the area in a set of interactive topic-based diagrams.

**New evidence:** A Cochrane review by Stead et al. (2015) investigated how providing more intense behavioural support for people using pharmacotherapy affected their likelihood of quitting.

The authors identified randomised and quasi-randomised controlled trials of pharmacotherapy (such as nicotine replacement therapy, varenicline, bupropion and nortriptyline) in adults who smoked. Participants had to be offered some type of behavioural support, from minimal (such as written information) to multisession face-to-face or telephone counselling. Trials had to have an intervention arm where participants received more intensive behavioural support (in terms of number or length of sessions or type of support) than those in the control arm.

The review included 47 studies with more than 18,000 participants, from mostly the US and Europe (1 UK study). The primary outcome was smoking cessation at the longest follow-up point. Most studies followed people up for 1 year, and the majority reported abstinence at a single point using biochemical verification of self-reported abstinence.

A pooled analysis of all 47 studies found that people who received high intensity behavioural support alongside pharmacotherapy were more likely to stop smoking than people who received lower intensity support and pharmacotherapy (risk ratio=1.17, 95% confidence interval 1.11 to 1.24, $p<0.00001$). In absolute terms, people who received high intensity behavioural support with pharmacotherapy were about 10% to 25% more likely to stop smoking than people who received variable intensity behavioural support with pharmacotherapy.

Limitations of this review include the variation in the intensity of behavioural support used in the included trials, and the degree to which the intensity of support differed between the intervention and control groups in each trial. In addition, two thirds of trials were at high or unclear risk of bias.

**Commentary by Dr Andy McEwen, Executive Director, National Centre for Smoking Cessation and Training:**

"This comprehensive review follows the rigorous methodology used by the Cochrane Tobacco Addiction Group to assess the effectiveness of behavioural support accompanying the use of stop smoking medications.

"The review confirms, and adds to, our knowledge about the importance of using behavioural support with smoking cessation medications. For example, we know that nicotine replacement therapy purchased over the counter without behavioural support is no more effective than quitting 'cold turkey' without any support (Kotz et al. 2014). However, nicotine replacement therapy is effective when accompanied by behavioural support provided by local stop smoking services.

"One of the limitations of this review lies not in the review itself, but in the lack of detail from the included studies as to what constitutes behavioural support, and furthermore what 'intensive support' looks like. A call has previously been made for more detailed reporting of the content and intensity of behaviour change interventions (Michie et al. 2009), which would assist us in further understanding these issues.

"A methodology has been developed to identify behaviour change techniques for smoking cessation (Michie et al. 2011), and we know which of these techniques have most evidence of effectiveness (West et al. 2010). As such, there is a strong case for future studies to describe the

intensity of behavioural support, at least in part, in terms of the behaviour change techniques included in the intervention.

“Helping smokers to have a realistic expectation of what stop smoking medications can offer (that is, that they are not a ‘magic bullet’) is one example of an evidence-based behaviour change technique. Other approaches supported by the evidence include advising people on the methods of using the medication, dose and duration, and how to deal with side effects.

“This type of support is provided by local stop smoking services and this review underlines the important role that they play. A free online training course on behavioural support around stop smoking medications is available from the National Centre for Smoking Cessation and Training to support practitioners in helping smokers to quit.”

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