

## **Tobacco cessation interventions for young people.**

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## **Tobacco cessation interventions for young people.**

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### **Source**

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### **Abstract**

#### **BACKGROUND:**

Most tobacco control programmes for adolescents are based around prevention of uptake, but teenage smoking is still common. It is unclear if interventions that are effective for adults can also help adolescents to quit. This is the second update of a Cochrane review first published in 2006.

#### **OBJECTIVES:**

To evaluate the effectiveness of strategies that help young people to stop smoking tobacco.

#### **SEARCH METHODS:**

We searched the Cochrane Tobacco Addiction Group's Specialized Register in February 2013. This includes reports for trials identified in the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, EMBASE and PsycINFO.

#### **SELECTION CRITERIA:**

We included randomized controlled trials, cluster-randomized controlled trials and other controlled trials recruiting young people, aged less than 20, who were regular tobacco smokers. We included any interventions; these could include pharmacotherapy, psycho-social interventions and complex programmes targeting families, schools or communities. We excluded programmes primarily aimed at prevention of uptake. The primary outcome was smoking status after at least six months follow-up among those who smoked at baseline.

#### **DATA COLLECTION AND ANALYSIS:**

Both authors independently assessed the eligibility of candidate trials and extracted data. Included studies were evaluated for risk of bias using standard Cochrane methodology. Where meta-analysis was appropriate, we estimated pooled risk ratios using a Mantel-Haenszel fixed-effect method, based on the quit rates at longest follow-up.

#### **MAIN RESULTS:**

Twenty-eight trials involving approximately 6000 young people met our inclusion criteria (12 cluster-randomized controlled trials, 14 randomized

controlled trials and 2 controlled trials). The majority of studies were judged to be at high or unclear risk of bias in at least one domain. Many studies combined components from various theoretical backgrounds to form complex interventions. The majority used some form of motivational enhancement combined with psychological support such as cognitive behavioural therapy (CBT) and some were tailored to stage of change using the transtheoretical model (TTM). Three trials based mainly on TTM interventions achieved moderate long-term success, with a pooled risk ratio (RR) of 1.56 at one year (95% confidence interval (CI) 1.21 to 2.01). The 12 trials that included some form of motivational enhancement gave an estimated RR of 1.60 (95% CI 1.28 to 2.01). None of the 13 individual trials of complex interventions that included cognitive behavioural therapy achieved statistically significant results, and results were not pooled due to clinical heterogeneity. There was a marginally significant effect of pooling six studies of the Not on Tobacco programme (RR of 1.31, 95% CI 1.01 to 1.71), although three of the trials used abstinence for as little as 24 hours at six months as the cessation outcome. A small trial testing nicotine replacement therapy did not detect a statistically significant effect. Two trials of bupropion, one testing two doses and one testing it as an adjunct to NRT, did not detect significant effects. Studies of pharmacotherapies reported some adverse events considered related to study treatment, though most were mild, whereas no adverse events were reported in studies of behavioural interventions.

#### **AUTHORS' CONCLUSIONS:**

Complex approaches show promise, with some persistence of abstinence (30 days point prevalence abstinence or continuous abstinence at six months), especially those incorporating elements sensitive to stage of change and using motivational enhancement and CBT. Given the episodic nature of adolescent smoking, more data is needed on sustained quitting. There were few trials with evidence about pharmacological interventions (nicotine replacement and bupropion), and none demonstrated effectiveness for adolescent smokers. There is not yet sufficient evidence to recommend widespread implementation of any one model. There continues to be a need for well-designed adequately powered randomized controlled trials of interventions for this population of smokers.

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