

NHS smoking cessation services and smoking prevalence: observational study

Eugene Milne

Northumberland
Tyne and Wear
Strategic Health
Authority,
Newcastle upon
Tyne NE15 8NY
Eugene Milne
deputy medical
director

eugene.milne@
nhs.net

BMJ 2005;330:760

Recently published health improvement targets for England aim to reduce adult smoking rates (from 26% in 2002) to 21% or less by 2010, reducing prevalence among routine and manual socioeconomic groups (from 31%) to 26% or less.¹ I estimate the contribution of current UK NHS smoking cessation services to delivery of these targets.

Participants, methods, and results

I took local smoking cessation data from quarterly returns, population estimates from 2001 census figures, and smoking prevalence estimates from the general household survey.

Northumberland and Tyne and Wear has 1.135 million people aged 15 and above (543 000 men, 592 000 women), of whom 333 000 are assumed to be smokers (33% of men and 26% of women, applying the general household survey prevalences for the north east aged at least 16 to the at least 15 population).

In 2003-4, 20 103 people in the region used smoking cessation services, of whom 9910 had still quit after four weeks (49.3%). Of these, I estimated 35-40% would still have quit after a year,² a long term figure of 3500-4000.

I assumed that the background quit rate was 1.5% (5000 a year).³ If all long term quitters using the services were additional to this, they would represent an annual attributable fall in local prevalence of 0.31-0.35%. Given that some of the quitters using the services would have quit without intervention, the true figure is smaller.

Numbers needed to treat (NNTs) offer an alternative approach to calculating attributable reduction in prevalence. For each additional quitter at one year, NNTs are around 17 for nicotine replacement treatment (gum or patches in large trials) and eight for bupropion.⁴ For entrants to the services whose treatment was recorded, 91% received nicotine replacement and 6% bupropion. An assumed average NNT of 15 would yield 1350 additional quitters, an annual attributable prevalence fall of 0.12%.

Comment

Although local NHS smoking cessation services had the highest throughput in the country, a fall in prevalence of more than 0.1-0.3% above background in 2003-4 was unlikely. At current rates the services would be unlikely to reduce prevalence in the region by more than 0.8-2.4% by 2010.

National smoking prevalence in the 1990s plateaued, but may have fallen by 0.4% a year in 1999-2002. We cannot assume that the contribution of NHS services will be entirely additional to this trend, given that some services were active during 1999-2002.

In the north east, much of the population is "routine and manual" and lies within the "fifth of areas

What is already known on this topic

California's tobacco control programme initially focused on smoking cessation with disappointing results

What this study adds

At best, current NHS smoking cessation services are unlikely to be reducing the prevalence of smoking by more than 0.1-0.3% a year

with the worst health and deprivation indicators" for whom narrowing of the circulatory disease and cancer inequality gaps are also targets. Passive smoking is worse in the north of England than in the south, and local prevalence of women smoking throughout pregnancy is about 25%.

Against this background, it is disturbing that the new English smoking prevalence targets do not propose a narrowing of the inequalities gap. As they stand, the gap in smoking prevalence would widen from 19% (31/26 - 1) to 24% (26/21 - 1). The likely impact of this on health disadvantage would be greater still.

In 1988-95 Californian smoking prevalence fell 10% against a background fall of 5.5% in the rest of the United States. Crucially, California used broader legislative action to achieve this, since "heavy early investment in cessation services had produced disappointing results."⁵

To narrow health gaps in England it is not sufficient simply to be better at delivering smoking cessation. Bupropion and nicotine replacement are among the most cost effective of all healthcare interventions, but comprehensive restriction of smoking in all workplaces works better. Both are needed and deprived areas need more of both.

Contributors: EM is the sole contributor.

Funding: None.

Competing interests: None declared.

Ethical approval: Not needed.

1 Department of Health. *National standards, local action: health and social care standards and planning framework*. London: DoH, 2004.

2 Soulier-Parmeggiani L, Griscom S, Bongard O, Avanzino R, Bounameaux H. One-year results of a smoking-cessation programme. *Schweiz Med Wochenschr* 1999;129:395-8.

3 Nicotine replacement therapy for stopping smoking. *Bandolier* 2001 Apr;86:3. www.jr2.ox.ac.uk/bandolier/band86/b86-3.html (accessed 24 Feb 2005).

4 Zyban for smoking cessation. *Bandolier* 2000 Sep;79:3 www.jr2.ox.ac.uk/bandolier/band79/b79-3.html (accessed 24 Feb 2005).

5 California Department of Health Services, Tobacco Control Section. A model for change: the California experience in tobacco control. Sacramento: CDHS, TCS, 1998.

(Accepted 21 January 2005)

doi 10.1136/bmj.38407.755521.F7

This article was posted on bmj.com on 18 March 2005: <http://bmj.com/cgi/doi/10.1136/bmj.38407.755521.F7>