



Smoking cessation and health inequality: an equity audit

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Nurses have a vital role in undertaking brief interventions and directing patients to NHS stop smoking services. This article reports on an audit that aimed to determine whether the local NHS stop smoking service delivered a 52-week quit rate in line with the national average of 15 per cent, and to relate this finding to health inequalities.

Approximately one-quarter of the adult population in the UK are smokers but prevalence is much higher in low-income groups. Smoking is the biggest single contributor to the difference in life expectancy and the increasing health gap between rich and poor.

Smoking Kills: A White Paper on Tobacco (Department of Health, 1999) outlined a range of measures to promote smoking cessation, including the setting up of local NHS stop smoking services.

The DoH (2004) outlined a framework for local support within communities to promote healthier lifestyles. Data collection is integral, and monitoring success rates at four weeks ensures the challenging DoH targets are met. The DoH recommends that a 52-week follow-up of successful quitters is carried out where practicable. The Blackpool, Fylde and Wyre NHS Stop Smoking Service has undertaken such an audit for 2003-2004 and, for this period, the four-week success rate was 54 per cent.

This health equity audit has added value in that the results are postcode-matched to areas of deprivation. A further audit is planned to ascertain the effects of any changes implemented as a result of the findings. Health equity relates not only to the distribution of resources but also to the 'differences in opportunity which result in unequal access to health services' (Hamer et al, 2003). The focus of a health equity audit therefore is to assess how fairly resources are distributed in relation to the health needs of the population.

Indices of multiple deprivation

Public health rating of deprivation is measured and ranked against the 354 local authorities in England, with a score of one being the most deprived and 354 the least deprived. This is determined by:

- Income;
- Employment;
- Health deprivation and disability;
- Education, skills and training;
- Barriers to housing and services;
- Crime and disorder;
- Living environment.

The use of public health mapping enables health care providers to further pinpoint deprivation by breaking localities down into areas of approximately 1,500 people. By tracking this over time local variations can be more accurately followed.

Fig 1 shows that Blackpool has most deprivation in the stop smoking service's catchment area and Fylde the least. The service therefore covers a wide range of clients with complex needs. A previous audit has shown that smokers from deprived wards are accessing the service and this is in line with national findings (Chesterman et al, 2005).

Overview of present service delivery

The service is organised for the three primary care trusts from a central administration office and accepts self-referrals. Clients are then contacted by one of seven trained smoking cessation advisers according to the locality of their GP. Clinics are held in a variety of locations across the catchment area and clients attend when it is convenient for them.

Clients are offered one-to-one consultations (generally lasting 30-45 minutes) or telephone counselling, with follow-on support according to individual need. They are helped to choose an appropriate method to help them quit - for example, nicotine replacement products or bupropion (a drug to reduce nicotine cravings) are available on prescription. Advisers also support clients by helping them to understand the psychological addiction using motivational techniques, and educational and self-help materials.

Clients are monitored by telephone or letter at four weeks after their quit date and the outcome is recorded. Carbon monoxide measurement is carried out where possible to validate reported success. Continuing support through further appointments or telephone is available for as long as clients require it. Relapse is often part of the quitting process and clients may make several attempts before becoming confidently smoke free. If their initial attempt is unsuccessful, they are encouraged to re-register with the service when they feel ready.

FIG 1. DEPRIVATION WITHIN THE AREA COVERED BY THE STOP SMOKING SERVICE

Overall index of multiple deprivation of Blackpool, Fylde and Wyre, ranked against the 354 local authorities in England (1=most deprived; 354=least deprived)



The smoking cessation advisers collaborate with health professionals in other settings, encouraging them to educate and inform the public that the NHS stop smoking service is available and accessible to smokers who wish to quit.

Method – retrospective audit

The audit sample (n=500) was obtained from the service minimum data set database. All clients who reported quitting at four weeks were selected retrospectively from 1 October 2003. The sample was in proportion to service uptake by PCT (Blackpool n=250; Fylde n=100; Wyre n=150), with equal numbers of males and females. It was checked against mortality data to ensure that all contacts were appropriate.

The selected sample received a postal questionnaire consisting of two questions only, to determine from each respondent:

- Were you able to quit smoking for 12 months or more?
- If not, do you intend to re-register with the stop smoking service?

They were encouraged to re-register with the service if they had relapsed, using a telephone number on an enclosed business card. A second mailing to people who did not initially respond took place four weeks later.

A total of 20 questionnaires were piloted, inviting clients to respond, with comments if desired. Eight replies were received (some with additional comments). All were completed accurately and no changes were made.

Letters were sent to all practice managers

throughout the three PCTs, for dissemination across teams informing them about the audit, inviting enquiries and including a sample questionnaire.

Results from returned questionnaires were entered onto a database and prepared for analysis when data collection was complete. Additional comments were recorded verbatim.

Quantitative data analysis was carried out and further analysed with the assistance of the public health intelligence officer to relate it to the index of multiple deprivation, matching postcodes to areas of deprivation. Public health mapping of the data was prepared for each PCT, so data was specific to localities. Some qualitative analysis of client comments was possible by searching for themes.

Results

Table 1 (p40) shows the overall result of the audit. The sample response across the three PCTs was 204, of whom 84 had quit, making the quit rate at 52 weeks 41.7 per cent of respondents. However, assuming that all non-responders were smoking would bring the success rate as a percentage of the total audit sample (500) to 16.8 per cent.

The 122 respondents who had relapsed by 52 weeks responded to the question 'If you have not quit would you re-register with the service?' very positively. The majority – 106 (87 per cent) – said they would try again with the help of the service. Ninety-five provided additional qualitative data.

Discussion

Limitations of the audit

The audit was undertaken internally with limited resources and a total of 500 service users across three PCTs were chosen. There was no selection on the basis of age, occupation, postcode area or ethnicity – gender was the only selection criterion. The sample size was considered manageable but would not represent a true cross-section of total client registrations. To put this into context, the total number of registrations for 2003–2004 was 3,636; therefore the sample was approximately 14 per cent of the annual client total. The sample number was considered sufficient for the purposes of this audit.

Measuring and achieving aims

The audit design aimed to elicit information not only on numbers who had maintained a successful quit attempt at one year or more but also to gain insight into clients' views of the service and to encourage re-registration. This was successfully achieved. The overall quit rate against standard was met and a substantial amount of additional qualitative information was collected that will inform future practice. No assumptions have been made about the low sample response rate. However, if there was an implied calculation that non-responders had not quit

REFERENCES

- Chesterman, J. et al (2005) How effective are English smoking treatment services in reaching disadvantaged smokers? *Addiction*; 100: (Suppl 2), 36–45.
- Department of Health (2005) *Delivering Choosing Health: Making Healthier Choices Easier*. www.dh.gov.uk/publications
- Department of Health (2004) *Choosing Health: Making Healthier Choices Easier*. London: DoH.
- Department of Health (1999) *Smoking Kills: A White Paper on Tobacco*. London: DoH.
- Dillon, A. (2001) *NICE and Clinical Governance in Advancing Clinical Governance*. London: Royal Society of Medicine Press.

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For related articles on this subject and links to relevant websites see www.nursingtimes.net

REFERENCES

Hamer, L. et al (2003) *Health Equity Audit Made Simple: A Briefing for Primary Care Trusts and Local Strategic Partnerships*. London: Association of Public Health Observatories and Health Development Agency.

Lowey, H. et al (2002) *Are Smoking Cessation Services Reducing Inequalities in Health?* An evaluation study. Liverpool: North West Public Health Observatory. John Moores University.

Raw, M. et al (2005) Lessons from the English smoking treatment services. *Addiction*; 100: (Suppl 2), 84-91.

Roberts, J., McKeown, K. (2001) Clinical governance for nurses: smoking cessation interventions. *Nursing Standard*; 15: 40, 33-36.

TABLE 1. OVERALL RESULT (TOTAL SAMPLE n=500)

	MALE	FEMALE	TOTAL
Had quit at 52 weeks	51	33	84
Had not quit at 52 weeks	57	63	120
No response	145	151	296

smoking, the overall success rate at 52 weeks would be 16.8 per cent; this would still exceed the required standard of 15 per cent.

Although the sample was not selected by postcode, mapping responses by ward shows that a substantial number of clients live in areas of social and economic disadvantage. The results show that by reaching the standard overall, we are including deprived populations. It should be noted that clients seen by advisers generally have the highest levels of nicotine addiction and tobacco dependence, which is reflective of economic status, particularly in the north west of England (Lowey et al, 2002).

In order to fulfil commitment to improving the health of the population, each of the PCTs has allocated resources to smoking cessation and tobacco control activity in a way that tackles local health inequalities and reflects local need. The PCT with the lowest level of deprivation of those served by the stop smoking service had a low response.

The one-to-one support offered by advisers gives clients the opportunity to have a holistic assessment of their lifestyle, coping skills and practical measures to ensure they are comfortable about seeking help in the future if necessary. Trust, rapport and respect for the client as an individual are key principles of the service (Roberts and McKeown, 2001).

Qualitative data

Nearly half of the respondents to the questionnaire added comments that were generally encouraging, positive and constructive. They included:

- 'I have been an ex-smoker for two years and couldn't have done it without your help. It is one of the best things I have ever done.'
- 'Since I stopped smoking, three members of my family have stopped.'
- 'I managed to stop - it's staying stopped that is the problem. If I had a monthly regular appointment I feel sure I could do it.'

Only three negative comments were received on the questionnaires, and these related to clients having difficulty in contacting the service rather than the quality of the service itself.

As a measurement of a public health intervention the health equity audit is a valuable tool. In using the questionnaire, we were employing a marketing

strategy for the service in addition to auditing it, as clients were invited to re-register with the service if they had not sustained their initial success. The questionnaire may also have encouraged them to use the service in the future even though they did not reply. It is important to note that the majority of responders who have returned to smoking said they would access the NHS service for future quit attempts. This may be construed as a measure of service quality when added to the positive comments obtained from questionnaire responses.

Clinical governance demands that health care interventions are both evidence based and cost-effective (Dillon, 2001). There is a professional obligation and expectation that health professionals will help patients and clients to access and engage with support to help them quit smoking.

Primary care is an entirely appropriate setting for smoking cessation services. Together with service liaison in secondary care settings, this fulfils a key public health role. The NHS stop smoking services are thought to have been so successful to date in achieving targets relating to areas of deprivation because the stop smoking clinics are located in GP surgeries and other easily accessible community venues. This provides a flexibility of approach and makes the service responsive to local need (Chesterman et al, 2005).

The most recent findings confirm that treating smokers represents excellent value for money, being one of the most cost-effective interventions provided by the English health care system (Raw, 2005). However, while smoking cessation targets are useful and monitoring is important, they must not detract from developing a quality service.

Tobacco control

It is timely to reflect on *Smoking Kills* (DoH, 1999) and place treatment services within a framework of tobacco control measures, which have now been updated in *Choosing Health* (DoH, 2005). The proposed legislative measures to ban smoking in public places, workplaces and NHS settings, measures to combat smuggling and counterfeit sales, national campaigns, education and the banning of tobacco advertising and promotion will all have an impact on the prevalence of smoking. ■