Public Health Research Consortium

Tobacco Control, Inequalities in Health and Action at the Local Level in England

- Smoking is the single most important cause of premature death and inequalities in health in the England.
- Much is known about how to reduce adult smoking, but few reviews and studies have looked at the equity impact of tobacco control interventions.
- Increasing the price of tobacco has the strongest evidence for reducing inequalities in smoking at the population level. Combined behavioural and pharmacological cessation support can reduce inequalities at the individual level if effectively targeted at low socio-economic status (SES) smokers.
- Evidence for the equity impact of other interventions is more equivocal, negative, insufficient or unavailable.
- Overall, smoking rates declined between 2001 and 2008, particularly among the more affluent. The decline appeared to result from an increase in never smokers rather than an increase in quit rates.
- Since 2008, there is evidence from the Smoking Toolkit Study to suggest that quitting and quit attempts have declined nationally.
- However, smoking prevalence remains higher and quit rates lower, in low SES compared to high SES groups, and in Northern regions of England, where levels of disadvantage are higher
- Those leading tobacco control strategy at regional or local level rely on nationally produced reviews and summaries of research evidence to inform policy and practice, and also informal networks to share good practice.
- Tobacco control leads regard local data on smoking and its health, social and economic impacts as vital for planning and supporting tobacco control initiatives aimed at reducing inequalities. These data need to be accessible, reliable, up-to-date and available at local (ward) level and collected year on year to enable services to demonstrate the effectiveness of their work.
- The move of public health to local authorities and GP consortia raises new challenges for local tobacco control and the supporting data and evidence that are required.

Background

Smoking is the single most important cause of premature death and inequalities in health in the UK. The Government's tobacco control plan for England 'Healthy Lives, Healthy People' identifies tackling smoking as a national public health priority and central to achieving its commitment to 'improve the health of the poorest, fastest'. The tobacco control plan charges local authorities, which are about to take responsibility for public health, with the duty of developing and implementing evidence-based comprehensive tobacco control in their areas.

To help inform and support tobacco control strategy and policy development at regional and local levels in England, the Department of Health's Policy Research Programme commissioned this review of tobacco control and inequalities in smoking. The review addressed three questions:

1. What is the evidence on the effectiveness of interventions to reduce adult smoking amongst socio-economically deprived populations and the implications for action at the regional and local level?

2. What are the sources of data in England on adult smoking amongst different social groups, in particular deprived populations, what do these tell us about patterns and trends in adult smoking in different social groups at national and local levels, and how might data collection be improved to assess the impact of tobacco control on smoking and inequalities?

3. How is tobacco control policy and practice developed, managed and monitored at regional and local levels?

Methods

The review consisted of three separate but complementary elements:

- a rapid narrative review of the international evidence on the effectiveness of tobacco control interventions to reduce socio-economic inequalities in smoking.
- a review of surveys and routine data on adult smoking (prevalence, consumption, quitting) and socio-economic status (SES) in England.
- qualitative interviews with tobacco control policy makers at the regional and local levels.

Full details of the methods can be found on the PHRC website (phrc.lshtm.ac.uk)

Key findings

Evidence on effectiveness of interventions to reduce socio-economic inequalities in smoking in adults.

Few reviews or studies have assessed the equity impact of tobacco control interventions. Ninety papers (9 reviews and 81 primary studies) met the inclusion criteria.

Population level policies:

- Strong evidence that price (tax) increases reduce socio-economic inequalities in smoking.
- Mass media campaigns can have negative or neutral equity impacts but recent evidence suggests that certain types of campaigns, when tailored to low SES smokers, could have a positive equity impact.
- Smokefree legislation increases the protection of low SES groups but its equity impact on smoking is not clear.
- The evidence on the equity impact of other types of interventions was insufficient or unavailable

Individual level interventions:

- Combined behavioural and pharmacological cessation support can reduce inequalities if effectively targeted at low SES smokers.
- Other types of cessation support have a negative equity impact or lack sufficient evidence to draw conclusions.

There is a lack of evidence on the equity impact of many regional and local level tobacco control activities, e.g., social marketing campaigns, tackling illicit tobacco, smokefree homes interventions, incentives for cessation.

Sources of data and patterns and trends in adult smoking and SES in England

- Six national datasets provide smoking and SES data at a regional level: Health Survey for England (HSE), the former General Household Survey (GHS)/General LiFestyle Survey (GLF) which has now become a module of the

Integrated Household Survey (IHS), British Household Panel Survey (BHPS), Smoking Toolkit, Omnibus/Opinions and Stop Smoking Services quarterly four week quit rates. The GHS has the largest sample size and the Omnibus and Toolkit provide the most detailed questions. However, the HSE is the best survey to use to generate sub-national estimates because it permits calculation of correct confidence intervals, and has a variety of questions on standard topics and a substantial sample size.

- Smoking prevalence and consumption in England are highly related to SES. Low SES groups have higher smoking rates and lower quitting rates.
- Smoking rates are highest in Northern regions, where levels of disadvantage are higher.
- Overall, smoking rates declined between 2001 and 2008, but there were regional and SES variations. The SES gradient was measured through a scale of indicators of low SES, ranging from most affluent (0 indicators) to most disadvantaged (7 indicators). Figure 1 shows how smoking rates varied over time by region and this composite measure of SES.
- The decline in smoking rates appeared to result from an increase in never smokers rather than an increase in quit rates.
- HSE data suggested that smoking was declining faster among high than low SES 2001-8 implying an increase in inequalities in smoking rates. However, these trends were not apparent in the Smoking Toolkit 2007-9 data. Thus no clear trends in inequalities in smoking rates were revealed.
- There is some evidence that quitting and quit attempts have declined overall since 2008.

Tackling smoking and inequalities at regional and local levels

- Regional and local leads reported a range of ways in which they addressed inequalities in smoking, though these varied in breadth, scope and extent.
- Reviews and summaries of the research evidence including guidance, notably that produced by NICE and the Department of Health, were important for informing policy and practice, along with informal ways of sharing good practice.
- Local data on smoking behaviour and its health social and economic impact were viewed as vital for planning and gaining support for tobacco control. These data ideally should be accessible, reliable, up-to-date and disaggregated at local (ward) level.
- The move of public health to local authorities and GP consortia potentially raises new issues and challenges for local tobacco control and the supporting data and evidence that are required.

Conclusions

The time and resources available for this review limited its scope and depth. In particular, it was not possible to assess the methodological quality of the papers in the systematic review; the survey data were restricted to nationally available sources and excluded sub-national data sources; the qualitative interviews were conducted at one point in time; and the interviewees may not have been representative of all those working in tobacco control at the local level.

While recognising these limitations, the review has identified important gaps in the currently available evidence, and highlighted potential implications for the future development and implementation of policy, research and practice at national, regional and local levels which aim to address socio-economic inequalities in smoking.

The evidence base for the equity impact of tobacco control interventions needs to be strengthened. This will require a range of different study designs and methodological approaches, from natural policy experiments to controlled trials, as well as support to those working in regional and local tobacco control to evaluate and disseminate their work on smoking and inequalities. These developments have the potential to contribute to the national and international evidence base and best practice in England.

Few survey data were available at below the regional level, which limited their usefulness for local planning and evaluation. The extent to which the IHS will be able to provide local level data was not clear at the time when this review was undertaken. Ideally data should be available at ward level and in a timely

manner. In addition, given the complexity of national survey data, statistical expertise, such as that available from Public Health Observatories, will need to be available to people working in tobacco control at the local level.

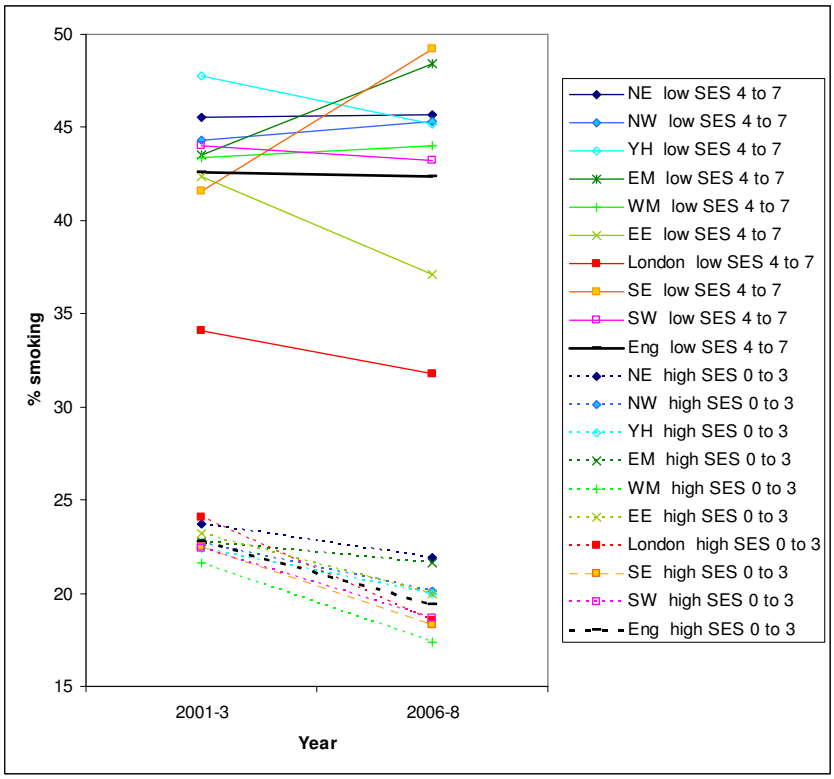

Figure 1. Smoking rates over time by count of low SES indicators and region

Details of the research team

Amanda Amos[1],Linda Bauld[2], David Clifford[1], Jenny Fidler[3], Sarah Hill[4], Rosemary Hiscock[5], Louise Laverty[6], Stephen Platt[1], Jude Robinson[6]

[1]Centre for Population Health Sciences, University of Edinburgh; [2] Stirling Management School, University of Stirling; [3]Department of Epidemiology and Public Health, University College London; [4]Global Public Health Unit, University of Edinburgh; [5]Department of Health, University of Bath; [6]Health and Community Care Research Unit, University of Liverpool

Address for Correspondence

Professor Amanda Amos, Centre for Population Health Sciences, Medical School, University of Edinburgh, Teviot Place, Edinburgh, EH8 9AG. Email address: amanda.amos@ed.ac.uk

About PHRC: The Public Health Research Consortium (PHRC) is funded by the Department of Health Policy Research Programme. The PHRC brings together researchers from 11 UK institutions and aims to strengthen the evidence base for public health, with a strong emphasis on tackling socioeconomic inequalities in health. For more information, visit: www.york.ac.uk/phrc/index.htm