

# Can general practitioners influence the nation's health through a population approach to provision of lifestyle advice?

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## SUMMARY

**Background.** Lifestyle advice from general practitioners (GPs) has been shown to have a positive effect on population health. In practice, GPs provide lifestyle advice to a minority of their patients only, those who are high risk or already have symptoms.

**Aim.** To look in depth at GPs' attitudes towards adopting a population approach to lifestyle advice and to use these results to identify ways of maximising the potential of GPs to affect population health.

**Method.** Thirty-six GPs, purposively sampled by identifying characteristics likely to affect their health promotion activity, participated in a focus group study. Data from the focus groups were transcribed verbatim and analysed using standard methods.

**Results.** The main themes that emerged suggested that GPs do not take a population approach to lifestyle advice because they prefer a high risk approach and doubt their ability to be effective in a population approach. GPs believed that social, cultural, and environmental factors were the most important determinants of population health. Furthermore, they were concerned about the detrimental effects on the doctor-patient relationship of providing lifestyle advice to all patients. GPs believed that a multi-agency, centrally co-ordinated approach was the preferred way to improve population health and that their role should be limited to secondary prevention.

**Conclusion.** Large amounts of resources would be necessary to convince GPs to adopt a population approach to lifestyle advice. Measures to tackle the social and environmental determinants of health may be a more effective and efficient means of improving the nation's health.

**Keywords:** lifestyle advice; population health; GP attitudes.

## Introduction

GOVERNMENT policy identifies the provision of professional advice on lifestyle risk factors as a key component in improving the nation's health.<sup>1</sup> It has been suggested that general practice is the ideal profession to provide such lifestyle advice,<sup>2-6</sup> because it has access to the majority of the population<sup>7</sup> and general practitioners' (GPs') advice has been shown to improve pop-

ulation levels of lifestyle risk factors.<sup>8-10</sup> Moreover, the public regard GPs as a credible source of lifestyle advice.<sup>11</sup>

Rose<sup>12</sup> argues that to achieve improvements in a population's health, interventions should aim to shift the population distribution of risk factors (a population approach), rather than just target high risk or symptomatic individuals (a high risk approach). Twenty years ago, Stott and Davies<sup>6</sup> pointed out that instead of using the 'exceptional' potential of the consultation to give lifestyle advice to all patients, GPs only gave advice when it was relevant to a patient's medical condition. They pointed out that this was 'often too late for the behaviour change to be effective'.<sup>6</sup> In addition, policy-makers and professional bodies place an emphasis on the role of GPs in population health.<sup>4,5,13,14</sup> Despite this, recent studies show that most GPs still provide lifestyle advice only when it is relevant to the patient's presenting complaint and do not take a population approach.<sup>15-18</sup> Indeed, there is evidence that even when a patient's illness provides an opportunity for lifestyle advice, this is rarely given.<sup>19,20</sup> For both GPs and policy-makers it is important to understand why this is so.

Previous research on GPs' attitudes to the provision of lifestyle advice has relied heavily on questionnaire surveys.<sup>2,15-18</sup> These studies provide little in-depth information that demonstrates what is required to persuade or enable GPs to take a population approach to lifestyle advice. Two qualitative studies of GPs' attitudes towards prevention and health promotion work suggest that they find this work less relevant, less interesting, and less appropriate than illness management work.<sup>21,22</sup>

The aim of this study was to look in depth at barriers that prevent GPs adopting a population approach to lifestyle advice, and to use these results to identify ways of maximising the potential of GPs to affect population health.

## Method

### Subjects and settings

In a previous questionnaire study on promoting physical activity,<sup>15</sup> we asked GPs in Bradford whether they would be willing to participate in a further study. Characteristics of GPs thought to have an influence over how they provide lifestyle advice were identified from the literature<sup>23,24</sup> and after discussions with colleagues. GPs were then purposively sampled<sup>25</sup> to ensure that the final sample consisted of GPs that contained these characteristics. Table 1 illustrates these characteristics together with the actual details of the participating practitioners.

### Focus groups

Thirty-six GPs participated in six groups of four to seven participants. The groups were facilitated by DAL and observed by either RDN or SK. We used a semi-structured interview guide that had been piloted previously. GPs were asked to discuss their approach to providing advice about physical activity. They were then asked to consider their approach to other lifestyle risk factors and to discuss how population health promotion might be best provided. The groups were carried out in line with current thinking on the use of focus groups in qualitative research.<sup>25-27</sup>

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**Table 1.** Description of purposive sample.

Characteristics identified for purposive sample	Characteristics of participating sample
<b>Practitioner characteristics</b>	
Sex	19 male; 17 female
Years of experience	Range = 6 months–22 years (median = 13 years)
MRCGP	20 with; 16 without
Full-/part-time/non-principal	16 full-time; 17 part-time; 3 non-principals
Personal level of physical activity <sup>a</sup>	12 sedentary or irregularly active; 14 regularly moderately active;
10 regularly vigorously active	
Personal smoking history	4 ex-smokers; 2 current smokers; 30 non-smokers
<b>Practice characteristics</b>	
Training practice	11 from training practices; 22 from non-training practices; 3 non-principals
practice	7 from single-handed practices; 8 from small practices (2–4 WTE <sup>b</sup> partners);
12 from medium practices (5–8 WTE partners); 9 from large practices	(9 or more WTE partners)
Deprivation	16 high; 14 medium; 6 low
Ethnic minority population <sup>c</sup>	9 GPs from practices with a large ethnic minority population

<sup>a</sup>Level of activity assessed by validated questions (source: Health Education Authority, Promoting physical activity in primary care — Guidance for the primary health care team. 1996.) <sup>b</sup>WTE = whole time equivalent. <sup>c</sup>Census data indicates that three electoral wards in Bradford have populations with 50% or more ethnic minority households. The nine GPs all worked in practices in these wards. All other data was obtained from health authority databases, which are subject to quality controls, and confirmed by the participating GPs.

The groups were audio-taped and transcribed verbatim.

### Analysis

Transcripts were read and broad themes described independently by each of the three authors as the groups progressed, so that emerging themes could be fed back and probed in more detail in future groups. No new major themes arose from the data from the final focus group. Upon completion of the six focus groups, the three authors independently read and re-read the transcripts and observer's notes and then described main themes.<sup>28</sup> After discussion between the authors these themes were categorised and allocated codes by DAL and the three authors then independently applied the codes to all transcripts. Where there was disagreement in the application of codes, discussion took place until a common result could be agreed. A report of the findings was sent to all participants in order to determine whether the results reflected the group discussion. No participants disagreed with the analysis.

### Results

Seven main themes emerged from the data. These seven themes appeared in all six focus groups and most of the discussion in each group was concerned with these themes. Table 2 summarises these themes and divides them into three areas: why GPs do not use a population approach to lifestyle advice; who should be responsible for such an approach; and the role for GPs within a population approach.

#### Why GPs do not adopt a population approach?

A population approach is not on the GPs' agenda. Participating GPs largely saw their role as managing patients' medical problems. They felt that they had received little training in providing lifestyle advice and that there was little incentive for them to take on the burden of this work.

*'I did no promotion because it is not on the agenda. I target my promotion so when you have someone who is obese you talk about exercise and diet, and with a cough you talk about smoking. I probably do the smoking more but I think it is still targeted'* (single-handed GP from an area of high deprivation). *'I think that is the*

*same for all of us. We don't have the time, the incentives or the skills really for behaviour change'* (GP from a large practice in an area of medium deprivation).

The next four themes all add to the reasons for it not being on their agenda.

#### GPs believe a population approach medicalises social problems and perpetuates the inverse care law

GPs felt most comfortable providing lifestyle advice when it was directly relevant to the patient's medical condition. A population approach was perceived to medicalise social problems, perpetuate the inverse care law, and 'victim blame', especially with deprived groups of patients.

*'Are we medicalising sociological phenomena?'* (GP from a small practice in an area of medium deprivation). *'Well not if you're talking about a high risk, targeted approach'* (GP from a small practice in an area of medium deprivation).

*'It does depend on how you do it [provide lifestyle advice] but I still think it is victim blaming, telling them to do this and that and almost refusing treatment unless they behave in this way'* (single-handed GP from a practice in an area of high deprivation and with a large ethnic minority population).

*'The ones that come to the clinics and the ones that get the advice really are those that need it least'* (GP from a large practice in an area of high deprivation with a large ethnic minority population). *'Yes someone did a study and said the clinics were...the inverse care law... It's worse than that really 'cos the lifestyle advice is like an added luxury for well-off healthy patients whereas those in areas like where you practice really need jobs and money...'* (GP from a medium-sized practice in an area of low deprivation).

#### Social, cultural and environmental factors determine health

GPs believed that social, cultural, and environmental factors were the main determinants of lifestyle risk factors and of health

**Table 2.** Summary of main themes to emerge from focus groups.

Why do GPs not adopt a population approach?	Who should be responsible for a population approach?	The role for general practice in providing lifestyle support
A population approach is not on the GPs' agenda GPs believe a population approach medicalises social problems and perpetuates the inverse care law Social, cultural, and environmental factors determine health GPs doubt their effectiveness in a population approach GPs believe patients do not want lifestyle advice	Multi-agency with central co-ordination	Secondary prevention or as therapy

and that they could have little influence on these factors.

*'It's so hard; we can't begin to understand what their lives are like, and really they need decent housing and jobs and what have you, more than us telling them to stop smoking and eat healthily'* (single-handed GP from an area of high deprivation). *'It's not our job to give people health really, it's to relieve their illness'* (GP from a large practice in an area of high deprivation).

*'I think we have a role in health promotion but we have to recognise that there are big limits to what we can achieve and it will take time'* (first speaker).

*'We can't change the environment in which they live, it needs some cool dude from the estate saying its good to exercise and daft to smoke, we don't have what it takes'* (GP from a medium-sized practice in an area of high deprivation). *'At the end of the day it is down to culture and environment and if you lived on....estate would you want to go walking round there? Or be able to give up drugs, booze or fags?'* (GP from a medium-sized practice in an area of medium deprivation).

#### GPs doubt their effectiveness in a population approach

GPs were aware of the population effectiveness of providing advice about smoking. However, some participants were not convinced that this was an efficient way to reduce smoking in the whole population. In other areas of lifestyle, participants felt there was a lack of good evidence of effectiveness and did not feel that the evidence from smoking could be assumed to apply to these areas. They also believed that their access to the population was not as widespread as assumed, since they only saw a minority of the population on a regular basis. Lack of time was also an important factor in making a population approach not feasible in practice.

*'But so far all the proof suggests it doesn't work. Smoking rates are going up in young children around 12 to 14... The OXCHECK and Family Heart Study really questioned the cost-effectiveness of this kind of thing. It seems to me it makes the government and doctors feel good, like they are doing something, but really it's not effective'* (non-principal with several years' experience of working in a number of practices in areas of high deprivation).

*'It works with smoking, it's small but across all the population it does make a difference... But I don't think you can then say the same for diet and exercise and other things, they're different'* (GP from a medium-sized practice in an area of medium deprivation).

*'When they say we can do it because we see the whole population its not true; we see 20% of the population*

*80% of the time and some groups like young men we don't see at all and they are the ones who need the advice'* (GP from a large practice in an area of high deprivation with a large ethnic minority population).

#### GPs believe patients do not want lifestyle advice

It was felt that lifestyle advice often annoyed patients and affected the doctor-patient relationship. This was especially so when advice was given unrelated to the patient's presenting complaint. There were also concerns about how appropriate it was for practitioners to interfere with individuals' rights to choose how to live their lives.

*'...and we are probably more likely to get a receptive hearing to our suggestions [when the advice is relevant to the presenting complaint] which we wouldn't necessarily with a sore throat. When you bang on about exercise they are going to say, "I'll see a different doctor next time"'* (GP from a large practice in an area of medium deprivation). *'Or, "He's the exercise doctor, we're not going to see him"'* (GP from a large practice in an area of high deprivation). *'No, I'm the 'non-smoking doctor' and they hate me for it, and they don't stop'* (single-handed GP from an area of high deprivation with a large ethnic minority population).

*'I just feel it is going too far and we have no right to interfere in people's lives in this way'* (GP from a small practice in an area of medium deprivation).

#### Who should be responsible for a population approach to lifestyle factors?

Participants believed that a multi-agency approach involving schools, local councils, and the media, which was centrally funded and co-ordinated, was the preferred way to achieve population change.

*'That's what I'm saying, we need a central clear commitment by the government'* (GP from a large practice in an area of high deprivation). *'We should really revolt against them on this one, health promotion...make them see, they should be banning cigarette ads on sports cars and making it safe to walk to school'* (GP from a small practice in an area of high deprivation with a large ethnic minority population). *'You see we're competing with things like 'Neighbours' and 'EastEnders' aren't we? It's hard and I think you have to have a whole approach haven't you? Looking at transport, what's on TV, what's going on in school'* (GP from a small practice in an area of low deprivation).

#### The role for GPs in providing lifestyle advice

The main role for GPs with regard to lifestyle advice was thought to be in secondary prevention. GPs perceived other

members of the primary care team, in particular practice nurses and health visitors, to have a greater role in a population approach. Many participants felt that primary care groups (PCGs) could potentially offer GPs a role in population health by enabling them to become much more involved in multi-agency and community work. In contrast, some participants felt that PCGs may continue to develop individual medical services and not move towards a population approach to health.

*'I think once the PCGs are up and running we can take a population or strategic approach. Not in the consultations but by working with community groups and social services and what have you to deal with poverty and all the problems on the estates'* (current non-principal with previous experience as a principal in a medium-sized practice in an area with high levels of deprivation).

*'In theory there is an opportunity with primary care groups to press on this [by] collaboration with other organisations and looking at community participation. However, I think what will happen in reality is that primary care groups will probably only engage in collaboration with other agencies on a token basis, because of our medical training and wanting the power, but also because the government won't fund true collaborative work'* (GP from a small practice in an area of medium deprivation).

## Discussion

### Strengths and limitations of the study

This study addresses an important subject. We used a qualitative technique, which has been shown to be a valid means of assessing GPs' attitudes,<sup>26</sup> and have demonstrated rigour in our methods and analyses.<sup>25-28</sup> The sample may, however, have some limitations. All of the participants worked in the area covered by Bradford Health Authority and had previously replied to our questionnaire.<sup>15</sup> However, the sampling ensured that GPs with a diverse range of experiences and beliefs participated. Our belief, therefore, is that these findings may have more widespread application. Although our previous questionnaire study was concerned solely with physical activity, and physical activity was used to open the group discussions in this study, the areas of discussion in the groups concerned all areas of lifestyle.

### Implications for policy and practice

This study illustrates important reasons why GPs do not take a population approach to lifestyle advice. Such an approach is not on their agenda because they prefer to adopt a high risk approach, see their role as mainly medical, and doubt their ability to be effective in a population approach, believing that social, cultural, and environmental factors are the most important determinants of population health. Furthermore, the GPs were concerned about the possible detrimental effects on the doctor-patient relationship of providing lifestyle advice.

While the findings from this study confirm those from two earlier qualitative studies of GPs' attitudes towards health promotion and disease prevention, which found that GPs were more comfortable with managing illness than they were promoting health or preventing disease,<sup>21,22</sup> they add important new perspectives. Previous work suggested that GPs felt lifestyle factors were the most important determinants of health.<sup>21,22</sup> While GPs in this present study agreed lifestyle factors were important to health, they clearly believed that social and environmental factors were the most important determinants of health. The integration of social and environmental factors with lifestyle factors as

determinants of health suggests a narrowing of the gap, in recent years, between GP and lay health beliefs. This has also been suggested by other work.<sup>29</sup> In addition, GPs in this study had an ethical concern regarding how appropriate it was to interfere in areas of patients' lives that were not related to their presenting illness.

One implication of these findings is that it is likely that large amounts of resources would be required to motivate GPs to be more active in modifying lifestyle risk factors. McAvoy *et al* also found that GPs doubted their abilities to modify patients' lifestyles.<sup>2</sup> They and others see the solution as a need for more training and education.<sup>2,17</sup> However, our results clearly show that more than education and training would be required to persuade GPs to take a population approach to modifying lifestyle risk factors. They would need to be convinced that this would not be detrimental to the doctor-patient relationship and that they could indeed influence population health.

Many of the reasons provided by GPs in this study for not taking a population approach are understandable and evidence-based. Butler *et al*<sup>30</sup> found that the doctor-patient relationship could be damaged if doctors routinely advised all smokers to quit. There is robust epidemiological evidence that lifestyle factors are associated with ill health.<sup>31-33</sup> However, it has also been shown that differences in lifestyle risk factors account for, at most, 40% of differences in mortality rates<sup>34</sup> and that environmental and social factors play a large part in determining health.<sup>35</sup> In addition, most lifestyle risk factors are themselves influenced by these social and environmental factors.<sup>36</sup> Shifting personal lifestyle behaviours, even slightly, is difficult. A recent systematic review of dietary change interventions concluded that sustained sufficient change was rare.<sup>37</sup> In commenting on the results of this review, Davey Smith concluded that health promotion or health education aimed at individuals was unlikely to be as effective as fiscal or legislative means.<sup>38</sup>

Our findings have important implications for policy makers. They suggest that continued calls for GPs to give lifestyle advice to the majority of the patients that they see will fall on deaf ears. Increasingly, evidence suggests that even if professionals were to consistently give this advice its effect on population health would be limited. As GPs in this study suggest, measures to tackle the social and environmental determinants of health may be a more effective and efficient means of improving the nation's health (Box 1).

- Policy-makers assume that lifestyle advice from GPs can have an important effect on population health.
- In practice, GPs only provide lifestyle advice to a minority of their patients; this is unlikely to affect population health.
- GPs doubt their ability to be effective in a population approach, believing that social, cultural, and environmental factors are the most important determinants of population health.
- Large amounts of resources would be necessary to convince GPs to adopt a population approach to lifestyle advice.
- Measures to tackle the social and environmental determinants of health may be a more effective and efficient means of improving the nation's health.

**Box 1.** Key messages about population health to emerge from the study.

## References

1. Department of Health. *Saving Lives: Our Healthier Nation*. London: The Stationery Office, 1999.
2. McAvoy B, Kaner EFS, Lock CA, *et al*. *Our Healthier Nation: are general practitioners willing and able to deliver? A survey of attitudes to and involvement in health promotion and lifestyle counselling*. *Br J Gen Pract* 1999; **49**: 187-190.
3. Department of Health. *Smoking Kills. A white paper on tobacco*. London: The Stationery Office, 1998.

4. Department of Health. *Eat Well. An action plan from the Nutrition Task Force to achieve the Health of the Nation targets on diet and nutrition*. London: The Stationery Office, 1994.
5. Department of Health. *More people, more active, more often. Physical activity in England*. London: The Stationery Office, 1995.
6. Stott NCH, Davis RH. The exceptional potential in each primary care consultation. *J R Coll Gen Pract* 1979; **29**: 201-205.
7. Office of Population Censuses and Surveys. *General Household Survey*. London: HMSO, 1991.
8. Law M, Tang JL. An analysis of the effectiveness of interventions intended to stop people smoking. *Arch Int Med* 1995; **155**: 1933-1941.
9. Mant D. Effectiveness of dietary intervention in general practice. *Am J Clin Nutr* 1997; **65**: S1933-S1938.
10. Ashenden R, Silagy C, Weller D. A systematic review of the effectiveness of promoting lifestyle change in general practice. *Fam Pract* 1997; **14**: 160-176.
11. Wallace PG, Brennan PJ, Haines AP. Are general practitioners doing enough to promote healthy lifestyle? Findings of the Medical Research Council's general practice research framework study on lifestyle and health. *BMJ* 1987; **294**: 940-942.
12. Rose G. *The Strategy of Preventive Medicine*. Oxford: Oxford University Press, 1992.
13. Department of Health. *The New NHS: modern, dependable*. London: The Stationery Office, 1998.
14. Hart JT. Coronary heart disease: preventable but not prevented? [Editorial.] *Br J Gen Pract* 1990; **40**: 441-442.
15. Lawlor D, Keen S, Neal RD. Increasing population levels of physical activity through primary care: general practitioners' knowledge, attitudes and self-reported practice. *Fam Pract* 1999; **16**: 250-254.
16. Bull FC, Schipper EC, Jamrozik K, Blinksby BA. Beliefs and behaviours of general practitioners regarding promotion of physical activity. *Aust J Public Health* 1995; **19**: 300-304.
17. Coulter A, Schofield T. Prevention in general practice: the views of doctors in the Oxford region. *Br J Gen Pract* 1991; **41**: 140-143.
18. Coleman T, Wilson A. Anti-smoking advice in general practice consultations: general practitioners' attitudes, reported practice and perceived problems. *Br J Gen Pract* 1996; **46**: 87-91.
19. Foss FA, Dickenson E, Hills M, *et al*. Missed opportunities for the prevention of cardiovascular disease among British hypertensives in primary care. *Br J Gen Pract* 1997; **47**: 571-575.
20. Boulton MG, Williams A. Health education in the general practice consultation: doctors' advice on diet, alcohol and smoking. *Health Educ J* 1983; **42**: 57-63.
21. Williams SJ, Calnan M. Perspectives on prevention: the views of general practitioners. *Sociology of Health and Illness* 1994; **16**: 372-393.
22. Williams A, Boulton M. Thinking prevention: Concepts and constructs in general practice. In: Lock M, Gordon D (eds). *Biomedicine Examined*. London: Kluwer Academic Publishers, 1988.
23. Hillsdon M. Promoting physical activity: issues in primary health care. *Int J Obes Relat Metab Disorder* 1998; **22(Suppl 2)**: S52-S54.
24. Langham S, Gillam S, Thorogood M. The carrot, the stick, and the general practitioner: how have changes in financial incentives affected health promotion activity in general practice? *Br J Gen Pract* 1995; **45**: 665-668.
25. Morgan D. *Focus groups as qualitative research*. [2nd edition.] London: Sage, 1997.
26. Barbour RS. Using focus groups in general practice research. *Fam Pract* 1995; **12**: 328-334.
27. Kitzinger J. Introducing focus groups. *BMJ* 1995; **311**: 299-302.
28. Miles MB, Huberman AM. *Qualitative data analysis: a sourcebook of new methods*. Beverly Hills, CA: Sage, 1984.
29. Rogers A, Popay J, Williams G, Latham M. *Inequalities in health and health promotion: insights from the qualitative literature*. [Inequalities in Health Report 1.] London: Health Education Authority, 1997.
30. Butler CC, Pill R, Stott NCH. Qualitative study of patients' perceptions of doctors' advice to quit smoking: implications for opportunistic health promotion. *BMJ* 1998; **16**: 1878-1881.
31. Doll R, Peto R, Wheatley K, *et al*. Mortality in relation to smoking: 40 years' observations on male British doctors. *BMJ* 1994; **309**: 901-911.
32. Blair SN, Kampert JB, Kohl HW, *et al*. Influences of cardiorespiratory fitness and other precursors on cardiovascular disease and all-cause mortality in men and women. *JAMA* 1996; **276**: 205-210.
33. Department of Health. *Committee on Medical Aspects of Food Policy: Nutritional Aspects of Cardiovascular Disease*. [Report on Health and Social Subjects No.46.] London: The Stationery Office, 1994.
34. Marmot MG, Davey Smith G, Stansfield S, *et al*. Health inequalities among British Civil Servants: The Whitehall II Study. *Lancet* 1991; **337**: 1387-1393.
35. Department of Health. *Independent Inquiry into Inequalities in Health Report*. London: The Stationery Office, 1998.
36. Blaxter M. *Health and Lifestyles*. London: Tavistock/Routledge, 1990.
37. Tang JL, Armitage JM, Lancaster T, *et al*. Systematic review of dietary intervention trials to lower blood total cholesterol in free-living subjects. *BMJ* 1998; **316**: 1213-1219.
38. Davey Smith G, Ebrahim S. Commentary on the dietary change meta analysis. *BMJ* 1998; **316**: 1220.

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