INTRODUCTION

A number of controlled trials of brief interventions in primary health care settings (Wallace et al., 1988; Anderson and Scott, 1992; Babor and Grant, 1992; Richmond et al., 1995; Israel et al., 1996; Fleming et al., 1997) have shown that, in comparison with controls, excessive drinkers (i.e. hazardous and harmful drinkers) will reduce alcohol consumption by >20% (Freemantle et al., 1993). These brief interventions include a variety of activities directed at patients identified by screening as drinking above medically recommended levels but with mild or no dependence on alcohol. Interventions typically consist of between 5 and 60 min of motivational counselling and alcohol education and between one and four scheduled sessions. If widely and consistently implemented by GPs, screening and brief intervention would help large numbers of excessive drinkers to cut down consumption to safer levels (Wallace et al., 1988). Thus brief interventions potentially offer a cost-effective way of decreasing the burden from excessive alcohol consumption on health and social services and of reducing the level of alcohol-related harm in the population.

Beginning with the first development of the community response to alcohol problems during the 1970s (Shaw et al., 1978), there has been a concerted attempt in Britain to persuade GPs, among other ‘frontline’ professionals, to become involved in identifying and intervening briefly with excessive drinkers. Research during the 1980s suggested that this effort had been largely unsuccessful at that time; studies by Anderson (1985) and by Clement (1986) reported low levels of activity among GPs in screening and intervention with heavy drinkers encountered in their practices. More recently, a household survey in England by the Office of Population Censuses and Surveys (Malbon et al., 1996) found that, of current and former drinkers who had spoken to a medical practitioner or other health professional in the last year, only 12% of men and 5% of women reported having discussed alcohol consumption with their GP at the surgery.

The study reported here was a survey of GPs in the English midlands which aimed to investigate their recognition of and intervention for excessive drinking and alcohol problems among their patients were assessed in a postal questionnaire survey. Levels of recognition of, and intervention for, excessive drinking by GPs were low. GPs did not routinely enquire about alcohol and had managed only small numbers of patients specifically for excessive drinking or alcohol problems in the previous year. Enquiry about alcohol issues was elicited mainly by physical symptoms or by new patient registrations. Although 83% of GPs felt prepared to counsel excessive drinkers, only 21% felt effective in helping patients reduce consumption. Over the past 10 years, there appears to have been an increase in numbers of GPs who feel that they should be working with alcohol issues, but fewer GPs perceive themselves as being effective in this work. The main barriers to brief alcohol intervention were given as insufficient time and training, and lack of help from government policy; the main incentives related to availability of appropriate support services and proven efficacy of brief interventions.
drinking and alcohol problems among their patients. It also aimed to assess GPs’ attitudes to this work and to determine whether any changes in these attitudes had occurred in the last decade. Factors related to screening and intervention and to attitudes to working with excessive drinkers, such as GPs’ levels of training and perceived levels of support for this work, were also studied. Finally, GPs’ views were obtained on barriers and incentives relating to brief alcohol intervention in primary health care settings. The study represented the British arm of Phase III (Strand 1) of the WHO Collaborative Project on Implementing and Supporting Early Alcohol Intervention Strategies in Primary Health Care.

METHOD

The study took the form of a postal survey, carried out in three stages from May 1995 to May 1996, of a sample of 430 GPs. One GP principal was randomly sampled from all practices in Leicestershire (n = 152), Derbyshire (n = 158) and Nottinghamshire (n = 120) using a random number table. Each GP was sent a questionnaire with a personalized covering letter, signed by one of the study chief investigators (B.Mc.), and a pre-paid addressed envelope. The covering letter explained the background to the survey and confirmed that ethical approval from the Local Research Ethics Committee had been granted. Two weeks after the original questionnaire had been sent, a telephone call was made to all non-responding GPs to encourage them to return the questionnaire. Two further questionnaires, accompanied by revised covering letters and pre-paid envelopes, were sent out to all non-responding GPs at monthly intervals beginning 1 month after the telephone call.

Questionnaire

The 132-item questionnaire was developed as part of the WHO Collaborative Project and was pre-tested and piloted on 160 GPs from 11 countries. A copy of the study questionnaire is available from the first author (E.K.) on request. GPs’ attitudes to alcohol issues were assessed via responses to a number of scales:

(1) GPs rated reduction of excessive drinking according to: its importance in promoting patients’ health, their preparedness to counsel patients, their current effectiveness in helping patients change this behaviour, and their potential effectiveness in helping patients change once adequate training and support had been provided. Ratings were on a 4-point scale ranging from ‘unimportant’ to ‘very important’, ‘very unprepared’ to ‘very prepared’; and ‘very ineffective’ to ‘very effective’.

(2) GPs’ diagnostic and management skills were assessed by means of responses to vignettes of two case histories. Case A (see Appendix 1) was a patient who was drinking excessively with some evidence of health problems, but no physical dependence. Case B (see Appendix 2) was a patient whose level of alcohol consumption and associated physical symptoms were suggestive of alcohol dependence. Mean differences in scores between the two cases were calculated for measures of problem severity, importance of abstaining from alcohol and confidence in helping to alleviate the problem. GPs also reported what further action they might take in each case.

(3) GPs were also asked about the extent to which they felt they should be involved, given appropriate support, in helping their patients change various health-related behaviours, including providing alcohol information, promoting non-hazardous alcohol consumption and treating dependent drinkers. Rating was on a 4-point scale ranging from ‘definitely not involved’ to ‘definitely involved’.

(4) GPs’ attitudes to working with excessive drinkers were assessed by the Shortened Alcohol and Alcohol Problems Perception Questionnaire (SAAPPQ; Anderson and Clement, 1987). Role legitimacy, adequacy, motivation, self-esteem and work satisfaction scores were calculated by summing the two statements in the SAAPPQ related to each of these variables (ratings on a 7-point scale ranging from ‘strongly disagree’ to ‘strongly agree’).

(5) Finally, incentives and disincentives for brief alcohol intervention work were examined by measuring GPs’ level of agreement with a range of suggested barriers and facilitating factors relating to this work. Agreement was rated on a 4-point scale ranging from ‘not at all’ to ‘very much’.

Statistics

All data were analysed using the SPSS for Windows computing program.
RESULTS

Response rates

Telephone calling revealed that 19 GPs had either retired, left the practice or were no longer practising medicine. Thus the eligible sample size for the survey was 411 GPs. Two hundred and seventy-nine GPs returned questionnaires to the research centre, a response rate of 68%. There were no significant differences between response rates among the three health districts surveyed (66%, 68% and 70% in Leicestershire, Derbyshire and Nottinghamshire respectively).

Sample characteristics

Average age of GPs was 43.7 (SD = 8.5) years and 76% were male. Respondents had been in general practice for an average of 13 years (SD = 8.3) and spent an average of 5.4 (SD = 1.0) days per week in practice. The largest proportion (48%) said they saw more than 150 patients per week and 39% saw between 101 and 150 per week. Half (50%) worked in urban practices, 16% in rural practices and 34% described theirs as a mix between urban and rural practices. The majority of GPs (77%) worked in group practices, with an average of 3 (SD = 1.9) partners per practice.

Extent of medical education and training on alcohol

The largest proportion of respondents (34%) indicated that they had received between 4 and 10 h of post-graduate training, continuing medical education or clinical supervision on alcohol and alcohol-related problems, whereas 31% indicated less than 4 h. A further 10% said they had received no post-graduate training on alcohol at all. Amount of training did not differ significantly by gender, age, solo versus group status of GPs or practice rurality.

Current management of excessive drinkers

Two-thirds of GPs (65%) reported that they had managed between one and six patients specifically for hazardous drinking or alcohol-related problems in the previous year and 4% indicated that they managed none. Male GPs reported having managed significantly more patients for alcohol problems than female GPs ($\chi^2 = 5.3, df = 1, P < 0.05$). The largest proportion of GPs (34%) indicated that they had taken or requested a blood test because of a concern about alcohol consumption 3–5 times in the previous year, with 23% having taken or requested a blood test 6–12 times. There were no significant differences by gender, age, solo versus group status of GPs or practice rurality in requests for blood tests.

Sensible drinking limits

GPs reported the upper limit for alcohol consumption for healthy adult males and non-pregnant females before they would give advice to cut down. Most (94%) answered this question in terms of units (standard drinks) per week rather than grammes of alcohol (one unit was described as ~10 g of alcohol). For men, the mean upper limit was 23 units per week (SD = 5.8); both median and modal values were 21, with 41% of GPs recording this value. For non-pregnant women, the mean upper limit was 16 units per week (SD = 4.5); median and modal values were 14, with 50% of GPs recording this limit. These data are reported in more detail elsewhere (Kaner et al., 1997).

Recognition of alcohol-related problems

The majority of GPs (67%) indicated that they asked their patients about alcohol consumption ‘some of the time’. A further 23% asked ‘most of the time’ and only 4% asked ‘all the time’. These responses did not differ by age, gender or practice rurality. GPs from solo practices reported asking patients about alcohol consumption more often than GPs from group practices ($\chi^2 = 10.4, df = 1, P < 0.01$). In an open-ended question, GPs were asked about typical conditions that would elicit an enquiry about alcohol consumption, and the categorized responses to this question are shown in Table 1. Thirty-one per cent of GPs listed both

Table 1. Typical conditions that would elicit enquiry by GPs about excessive drinking

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Mean percentage</th>
</tr>
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<tbody>
<tr>
<td>Physical symptoms</td>
<td>11</td>
</tr>
<tr>
<td>Psychological symptoms</td>
<td>1</td>
</tr>
<tr>
<td>Social symptoms</td>
<td>0</td>
</tr>
<tr>
<td>Physical and psychological symptoms</td>
<td>31</td>
</tr>
<tr>
<td>Physical and social symptoms</td>
<td>3</td>
</tr>
<tr>
<td>Social and psychological symptoms</td>
<td>0</td>
</tr>
<tr>
<td>Physical, psychological and social symptoms</td>
<td>12</td>
</tr>
<tr>
<td>Physical, psychological, social symptoms and other conditions</td>
<td>36</td>
</tr>
<tr>
<td>Other conditions only</td>
<td>6</td>
</tr>
</tbody>
</table>
physical and psychological symptoms and 36% listed a combination of physical, psychological, social and other conditions. ‘Other conditions’ referred mostly to new patient registrations. Only 1% of GPs listed psychological symptoms alone and none listed social problems alone. Responses did not differ significantly by either gender, age, solo versus group status of GPs, or practice rurality.

**Attitudes to intervening for excessive alcohol consumption**

Over three-quarters of the GPs (77%) believed that drinking alcohol moderately was ‘important’ (51%) or ‘very important’ (26%) in promoting patients’ health; 83% were ‘prepared’ (57%) or ‘very prepared’ (26%) for counselling. Just 21% of GPs currently felt either ‘effective’ (20%) or ‘very effective’ (1%) at helping patients reduce excessive alcohol consumption. However, 58% felt that they could be: ‘effective’ (44%) or ‘very effective’ (14%) given adequate information and training. Ninety per cent (90%) of GPs reported that they either ‘always’ (32%) or ‘as indicated’ (58%) obtained information on patients’ alcohol consumption.

**Diagnostic and management skills**

GPs indicated that the drinking problem was significantly more severe \(z = 12.4, P < 0.001\) in Case B (the dependent drinker) than in Case A (the excessive drinker) and they were more concerned that Case B should stop drinking alcohol altogether \(z = -11.9, P < 0.001\). However, GPs were significantly less confident \(z = -4.10, P < 0.001\) about being able to help Case B alleviate his drinking problem compared to Case A. Ratings were not significantly related to gender, age, solo versus group status of GPs, or practice rurality. The most frequent action recorded for Case A was to advise the patient to cut back on drinking (89% of respondents), whereas for Case B it was to advise abstinence (74% of respondents). A similar proportion of GPs (96% and 95%) indicated that they would ask some further questions about drinking for Case A and Case B, and 99% indicated that alcohol was probably related to some of the associated problems for both cases. Significantly more GPs (99%) indicated that they would order a complete blood count for Case B compared to Case A (85%) \(\chi^2 = 27.3, df = 1, P < 0.001\). Significantly fewer GPs \(\chi^2 = 113, df = 1, P < 0.001\) said they would refer Case A to a specialist agency (15%) compared to Case B (71%). These responses did not differ by gender, age, solo versus group status of GPs, or practice rurality.

**Attitudes to working with excessive drinkers**

Most respondents (88%) felt that GPs should be: ‘involved’ (40%) or ‘definitely involved’ (48%) in promoting non-hazardous alcohol consumption, and a similar number (86%) felt that GPs should be: ‘involved’ (36%) or ‘definitely involved’ (50%) in providing alcohol information. GPs were less accepting of a role in treating alcohol-dependent patients, with 60% endorsing the responses: ‘involved’ (41%) or ‘definitely involved’ (19%).

Table 2 shows the proportions of GPs agreeing with statements relating to the five variables of the SAAPPQ when working either with excessive drinkers or dependent drinkers. Mean role adequacy and work satisfaction scores were significantly higher for working with excessive drinkers than for working with dependent patients \(z = -6.00, P < 0.001\) and \(z = -4.89, P < 0.001\) respectively). Role motivation and role legitimacy scores did not differ significantly between excessive drinkers and dependent patients. In contrast, mean self-esteem scores were significantly higher for working with dependent patients than for working with excessive drinkers \(z = -5.22, P < 0.001\).

**Disincentives and incentives for brief alcohol intervention in primary health care**

The most strongly endorsed disincentives for brief alcohol intervention work were: that doctors were too busy dealing with the presenting problems of patients (72% agreement); that doctors were not trained in counselling for reducing alcohol consumption (62% agreement); and that government policies did not support preventive medicine (56% agreement).
The lowest rated disincentive was that patients would resent enquiry about alcohol issues (21% agreement). These data are shown in Table 3.

The most strongly endorsed incentives for brief alcohol intervention work were: more readily available support services to refer patients to (85% agreement); if early intervention was proven to be successful (80% agreement); and if patients requested advice about alcohol (77%). The lowest rated incentive concerned patients’ willingness to pay for alcohol counselling (24% agreement). These data are shown in Table 4.

**DISCUSSION**

This postal survey achieved a good response rate as over two-thirds of the GPs returned their questionnaire. Moreover, survey respondents were relatively representative of GPs nationally in...
relation to several characteristics including (survey versus national figures): age (73% versus 72% aged under 50) and gender (24% versus 30% females) (Royal College of General Practitioners, 1996a); practice type (77% versus 70% group practices) and average number of partners per practice (3.4 versus 3.3 partners) (Royal College of General Practitioners, 1996b). In addition, 48% of GPs in this survey had over 150 consultations per week which relates well to the national average of 152 consultations per week (Royal College of General Practitioners, 1996c). Nonetheless, it is well known that non-responders to surveys may be different in characteristics to those who respond. Non-responders in GP surveys are likely to be older, more experienced, less well qualified and often single-handed practitioners and possibly those who feel under more stress (McAvoiy and Kaner, 1996). Thus it is possible that alcohol-related attitudes and practices of non-responding GPs may be even more negative than those reported in this survey.

There was little effect of age, gender, solo versus group status of GPs, or practice rurality on experience of alcohol education and training or attitudes and practices relating to alcohol. The only differences were that male GPs reported managing more patients for alcohol problems during the last year than female GPs and solo GPs reported asking about alcohol consumption more often than GPs from group practices.

Most GPs did not routinely enquire about alcohol and relatively few blood tests were requested in the last year because of concerns about alcohol. The fact that 65% of GPs had managed one to six patients in the last year for excessive alcohol consumption was striking in view of evidence suggesting that ~20% of patients presenting to primary health care are likely to be excessive drinkers (Anderson, 1993). Given that the average list size per GP is 1820 patients (Royal College of General Practitioners, 1996b), it is likely that the mean number of excessive drinkers seen by GPs each year is ~364. Thus the majority of GPs may be missing as many as 98% of the excessive drinkers presenting in primary health care. GPs’ failure in identifying excessive drinkers may be due to a reliance on physical symptoms to elicit enquiry about alcohol which suggests that they are focusing on a ‘medical’ model of alcohol problems.

Most GPs felt that moderate alcohol consumption was important for health promotion. However, only a third of GPs always enquired about patients’ alcohol consumption and a further 58% enquired only if symptoms indicated that this was necessary. These figures may be over-estimates, given the data reported for actual practice during the last year. Most GPs felt prepared to counsel patients about alcohol consumption, although only a fifth of the sample felt effective in helping patients reduce consumption.

Whilst it is difficult to draw firm conclusions from comparisons with previous GP surveys, due to differences in context and methodology, such comparison is useful in highlighting trends over recent years. The scale of perceived ineffectiveness in helping to reduce alcohol consumption is disappointing since a study more than 10 years ago reported that, although only 29% of GPs regularly gave advice to patients to reduce alcohol consumption, 56% believed their advice was effective (Anderson, 1985). Experience of training and education about alcohol issues may have improved in recent years, since 42% of GPs in this study reported receiving <4 h post-graduate training on alcohol-related issues compared to 66% reported in the Anderson (1985) study. GPs’ estimates of how much they would benefit from more training and support suggest that efforts to increase training in this area would on the whole be welcome by GPs.

In comparison with earlier work (Anderson, 1985; Clement, 1986) more GPs felt that they should work with problem drinkers (role legitimacy) and that they possessed adequate knowledge and skills to do so (role adequacy). However, there appears to have been a deterioration in GPs’ motivation to work with problem drinkers and in the satisfaction they expect to gain from doing so. Our findings fit with those reported in a recent national GP survey (Deehan et al., 1995). This apparent increase in GPs’ ‘role legitimacy’ in recent years may be due to the increased emphasis on preventive medicine and health promotion in medical training and practice.

However, despite increased ‘role legitimacy’, many GPs do not feel confident about their abilities to intervene with alcohol problems. Accepting that it may be difficult to generalize from responses to case vignettes to actual practice, GPs in this survey were able to discriminate between cases of ‘excessive drinking’ and ‘alcohol dependence’ and indicate appropriate action in each case. Nevertheless, GPs lacked confidence in their ability to help alleviate
drinking problems, particularly in the case of alcohol dependence. On the other hand, 60% of the GP respondents reported that they should be involved in treating alcohol dependent drinkers if appropriate support was provided.

The main disincentives for brief intervention for excessive alcohol consumption were insufficient time and training and lack of help from government policy. Lack of time may relate to the high workloads reported by GPs in this survey and more generally in the UK (Royal College of General Practitioners, 1996c). Among the 14 countries involved in the WHO International Collaborative Project, UK GPs were second only to those in Hungary in numbers of patients seen each week. It is interesting that patient resentment and GP awkwardness were not considered important barriers to brief intervention work. This might be seen as an improvement, given the earlier literature on the role of these interpersonal factors in discouraging enquiries about alcohol consumption (Cartwright, 1980; Thom and Tellez, 1986) and also suggests that interpersonal factors are now less important than the obvious structural and professional factors of workload and training. GPs regarded support services as essential if they were to become involved in brief alcohol intervention work. It may be that GPs are reluctant to screen for alcohol problems because they suspect that this will reveal too many serious problems for which they feel unskilled and unsupported in responding to (Durand, 1994). Finally, GPs reported that evidence of the effectiveness of brief intervention was an important incentive for being more active in the alcohol area. This finding suggests a need for more proficiency in disseminating the strong evidence for the effectiveness of brief alcohol intervention that already exists (Bien et al., 1993; Freemantle et al., 1993; Heather, 1995; Kahan et al., 1995).

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APPENDIX 1. CASE HISTORY A: THE EXCESSIVE DRinker

Mr A. is a 48-year-old man who presents for a physical examination. The patient lives alone and has been a member of your practice for about 3 years. He has attended intermittently during this time. He provides a history of sleep disturbances, which consist of waking some 3–4 h after falling asleep and then experiencing difficulty getting back to sleep. He also reports occasional dyspepsia relieved by ingestion of alkali preparations from the chemist. Upon your inquiry, he reports giving up smoking about 4 years ago. He does, however, report drinking alcohol and states that his average weekly consumption is about 20 pints of beer and about 5–6 glasses of table wine. History and functional inquiry are unremarkable in all other respects. On physical examination, the patient is noted to be moderately obese, of neat appearance and otherwise unremarkable. Pulse was 88 beats per minute and regular. Blood pressure was 144/94. Respiratory rate was 20 per min. The remainder of the physical examination was completely normal.

APPENDIX 2. CASE HISTORY B: THE DEPENDENT DRinker

Mr B. is a 54-year-old man presenting with a chest infection involving the lower respiratory tract. The patient lives on his own and first attended your practice about 3½ years ago. He has attended intermittently during this time. His chest infection has been recurring and this is the third presentation in the past 12 months. The patient was a heavy smoker, but reports giving it up about 5 years ago. He does, however, report drinking alcohol and states that his weekly consumption averages about 20 pints of beer and one bottle of vodka. Investigation reveals evidence of early pneumonia. On examination of his abdomen, his liver is significantly enlarged with a firm, tender lower border. He has a fine tremor in his hands and his blood pressure was noted to be 180/110.