

Implementing screening and brief alcohol interventions in primary care: views from both sides of the consultation

Deborah Hutchings Centre for Alcohol and Drug Studies, Newcastle, North Tyneside and Northumberland Mental Health NHS Trust, Northumberland, UK, **Paul Cassidy** Teams Family Practice, Gateshead and Clinical Governance Lead, Gateshead PCT, UK, **Emma Dallolio** Centre for Alcohol and Drug Studies, Newcastle, North Tyneside and Northumberland Mental Health NHS Trust, Northumberland, UK, **Pauline Pearson** Primary Care Nursing, School of Medical Education Development, University of Newcastle upon Tyne, Newcastle upon Tyne, UK, **Nick Heather** Alcohol and Other Drug Studies, Division of Psychology, Northumbria University, Northumbria, UK and **Eileen Kaner** Senior Lecture in Public Health and NHS Primary Care Career Scientist, University of Newcastle upon Tyne, Newcastle upon Tyne, UK

Excessive drinking is a global health problem which is responsible for a wide range of both chronic and acute illness, and which costs the UK National Health Service (NHS) £1.7 billion annually. Current health policy aims to reduce alcohol-related problems by promoting early identification of risk followed by brief intervention to facilitate positive changes in drinking level or patterns of consumption. However, practical and philosophical barriers concerning screening and brief alcohol intervention have so far impeded its uptake in routine primary care. This qualitative study aimed to simultaneously explore and compare health professionals' and patients' views on the acceptability and feasibility of screening and brief alcohol intervention in primary care. Focus groups were held with (a) four primary care teams, (b) two general practitioner (GP) and two nurse groups and (c) six patient groups in the north-east of England. A thematic framework approach was used to analyse audio-taped data via transcripts. Both health professionals and patients reported that raising and discussing alcohol-related risk was acceptable in primary care, when combined with other lifestyle issues or linked to relevant health conditions. Targeted rather than universal screening was the most acceptable method of identifying alcohol-related risk and would fit well with existing practice. However, there was uncertainty among health professionals about the effectiveness of brief alcohol interventions and some disagreement with patients concerning who was best placed to deliver them. Health professionals felt that nurses were best placed for such work whilst patients reported that they would initially raise the subject with GPs. There was broad acceptance of brief intervention approaches but a lack of support and specific incentives for this work impeded its delivery in routine practice.

Key words: brief alcohol intervention; implementation; primary care

Received: January 2005; accepted: February 2006

Introduction

Hazardous and harmful alcohol consumption is a global health problem that contributes 4% to the

total disease burden worldwide, as measured by disability-adjusted life years (DALYS) (Rehm *et al.*, 2003). This burden is more evident in developed countries (9% DALYS), where alcohol ranks third after smoking and hypertension as the lead cause of morbidity and premature death. Thus the World Health Organisation has coordinated international research aimed at reducing hazardous and harmful drinking, and its concomitant alcohol-related

Address for correspondence: Dr Eileen Kaner, School of Population and Health Sciences, The Medical School, Framlington Place, Newcastle upon Tyne, NE2 4HH, UK.
Email: e.f.s.kaner@ncl.ac.uk

problems across populations (Monteiro and Gomel, 1998; Funk *et al.*, 2005).

In the UK, almost a third of men and a fifth of women drink alcohol at hazardous or harmful levels, and for many young people binge drinking has become the usual pattern of consumption (Office for National Statistics, 2000). The range of problems related to alcohol is very wide, from chronic illness such as liver disease to acute events such as trauma following intoxication, and the cost of alcohol-related illness and injuries to the NHS has been estimated as £1.7 billion each year (Strategy Unit, 2004). In 2004, the Alcohol Harm Reduction Strategy for England proposed a number of measures to reduce alcohol-related problems including early identification and brief intervention in primary care (Strategy Unit, 2004). Brief intervention is a secondary prevention approach in which hazardous and harmful drinkers receive personalized feedback about their drinking and simple structured advice about how to reduce alcohol-related risk; the goal is generally reduced, or non-problem drinking, as opposed to abstinence (Moyer *et al.*, 2002).

However, although numerous randomized controlled trials have shown that screening and brief intervention is efficacious in reducing levels of hazardous and harmful drinking (Wilk *et al.*, 1997; Moyer *et al.*, 2002), there has been much discussion over its implementation in primary care. Recent debate has highlighted practical and philosophical difficulties with universal screening for alcohol-related risk (Beich *et al.*, 2002; Kelly, 2002) and a reluctance to incorporate brief alcohol intervention into routine practice (Heather and Mason, 1999). Concerns have been raised that universal screening of the practice population is time consuming, will only benefit a few patients and will result in a high rate of disappointment for practitioners (Beich *et al.*, 2003). There are also concerns about broaching alcohol-related issues which have not been raised by the patient or that are unrelated to their presenting problem (Kelly, 2002), and a subsequent fear of provoking negative reactions in patients (Kaner *et al.*, 1999; Lock *et al.*, 2002). Whilst primary care professionals' views regarding the difficulties of discussing alcohol-related problems are well documented, less is known about patients' perspectives on the subject. In general, patients expect GPs and practice nurses to ask about and advise on lifestyle issues (Wallace and Haines, 1984; Rush *et al.*, 2003) but

less is known about their emotional and behavioural responses to such enquiry.

To our knowledge, no study to date has simultaneously compared health professional and patient views on lifestyle intervention; particularly in the area of alcohol consumption. However, effective dialogue in primary care consultations requires both clinician and patient engagement with the subject matter. Previous work has separated these viewpoints, risking a continuing misalignment of expectations about levels of interest or receptivity to such discussion (Wallace and Haines, 1984). This study investigated patients' and health professionals' views about the appropriateness, feasibility and best context for detection and brief alcohol intervention in routine primary care. It forms part of a World Health Organisation project on the routine implementation of alcohol screening and brief intervention in primary care in England (Funk *et al.*, 2005).

Methods

Setting and participants

Focus groups were held with (a) four primary care teams, to explore a range of responses within 'real' practice team situations; (b) two GP and two practice nurse groups separately, to explore emergent issues and professional differences in attitudes and experiences and (c) six patient groups, stratified by age and gender. Professionals were purposively sampled (a) on experience of using a brief intervention programme (to gain both user and non-user views) and (b) on occupation. Patients were randomly sampled from general practice lists, followed by quota sampling from the general public to achieve an age/gender balance between groups. All participants were recruited in the north-east of England. The characteristics of the health professionals and patients are shown in Table 1.

Groups were conducted in a range of settings and were approximately 1 hour in duration. All professionals were offered a certificate of attendance and GPs received Postgraduate Education Allowance (PGEA) accreditation. Professionals attending in the evenings were also offered a small gift voucher as an incentive to attend. Patients were offered payment of travel expenses. Groups were conducted between August 2000 and November 2001. Ethical approval was obtained from the Local Research Ethics Committee as appropriate.

Table 1 Summary of health professionals' and patients' characteristics

Group	Occupation	Gender	Age range	Drinking status*
Health professionals	18 GPs	10 male	26–62 years	19 sensible drinkers
	15 practice nurses	33 female		16 not reported
	4 practice managers			5 non-drinkers
	2 student nurses			3 excessive drinkers
	2 health visitors			
	1 district nurse			
	1 receptionist			
Patients	12 employed	19 male	18–77 years	13 sensible drinkers
	7 students	12 female		9 binge drinkers
	6 retired			6 non-drinkers
	4 housewives			3 excessive drinkers
	2 unemployed			

* Drinking status was determined by participants' responses to the questions: 'How many days per week do you have an alcoholic drink?' and 'On a typical day when you are drinking how many units of alcohol do you have?' A 'sensible drinker' was defined as drinking less than or up to the medically recommended weekly levels of 14 units for women and 21 units for men (Faculty of Public Health Medicine/Royal College of Physicians, 1991). An 'excessive drinker' was defined as regularly drinking above those levels. A 'binge drinker' was defined as regularly drinking 6 or more units on a single drinking occasion

Data collection

Groups were moderated by an experienced researcher (health services researcher, GP or health visitor) using a semi-structured topic guide, with a second researcher acting as an observer and note taker. Questions were open-ended and a 'funnel' approach was used, starting with a general consideration of experiences of discussing alcohol and gradually focusing on the implementation of brief alcohol intervention in primary care. As data collection and analysis were iterative in nature, the topic guides were subsequently informed by emergent findings. Data collection continued until no new issues were emerging from the groups and saturation was judged to have occurred. Triangulation was achieved via a Delphi survey of expert opinion, the results of which are published elsewhere (Heather *et al.*, 2003).

Data analysis

Groups were audio-tape recorded and transcribed verbatim for qualitative analysis. Confidentiality and data protection policies were followed. Analysis was conducted using the thematic framework approach (Ritchie and Spencer, 1994), which is both deductive (a 'top-down' approach informed by the aims of the research) and inductive (a 'bottom-up' approach grounded in the responses of the participants). Anonymized transcripts were read and reflected on independently by two of the

authors (DH and PC), and themes were identified and agreed on. Transcripts were imported into a qualitative software programme for the organization of data and application of the coding frame using a constant comparison approach. Data matrices provided a transparent overview of the analyses each containing a summary of the participants' views about an identified theme so that comparisons could be made between them.

Results

Whether alcohol should be discussed in primary care

A clear majority of health professionals and patients considered questions about alcohol consumption and risk to be part of the primary care professional's role, even though most patients and many professionals perceived alcohol-related problems in social and behavioural rather than health terms. GPs and nurses felt that young people, who are not seen as frequently in primary care, would be more effectively targeted elsewhere, and some patients felt that alcohol advice should be provided in schools and universities as well as GP surgeries. However, there was disagreement about how widespread alcohol-related problems actually were, with some professionals feeling that it was relatively small problem and others describing it as huge.

Alcohol and drug use is a big part of my work, it impacts a lot on my work with parents and my client group. Sometimes very negatively. And has some very damaging effects on some families. So I'm interested in working with people to prevent it.

(Professional 28, health visitor)

I suspect it's probably not going to be a huge number of patients you're looking at though, is it? Who would actually come through your doors with sufficient amounts of alcohol to actually want you to intervene?

(Professional 14, GP)

There was also uncertainty amongst health professionals as to whether brief alcohol interventions were effective in changing drinking behaviour, with many stating that they would need concrete evidence before considering implementation. They also identified certain groups of patients (eg, 'heavy' or more severely alcohol-dependent drinkers and those unmotivated to change) with whom they felt that the success rate would be negligible. However, both health professionals and patients believed that a brief intervention could be useful for patients who were not aware of how much they were drinking or what the recommended levels were.

I'm sure there are other people, and these make up the largest number, who drink too much and think it's probably not a good idea but don't really know why it's not such a good idea – sometimes have a bit of a hang-over and get to work late. And also in that group there'll be people who probably genuinely think that they are drinking too much.

(Professional 15, GP)

We've never set about quantifying anything like advice against excessive drinking or indeed smoking, so I mean we can't tell you anything on that, but my gut feeling is that the success rate is very, very small. Infinitesimal probably. So that's one of the reasons why, if you were looking at a programme like this, it would have to be absolutely spanking brand new, with huge resources against it and a political will driving it.

(Professional 22, practice manager)

Many health professionals believed that most patients did not know how many units they were

drinking or how much they 'should' or 'should not' drink, and that these patients would not realize that their drinking could be at hazardous or harmful levels. Indeed, health professionals themselves expressed uncertainty about recommended 'safe' drinking levels and found messages about alcohol to be complex and difficult to discuss with patients. In fact, with the exception of the younger male participants (aged 18–20), most patients were able to estimate the recommended levels with reasonable accuracy, but did not measure excessive drinking in terms of units and were confused about how many units different drinks contained.

How many people know what a drink is? (agreement). If you went into a pub, you know, like as a Chronicle reporter or Tyne Tees (TV) and said, 'excuse me, do you know how many units are in that glass?' How many people would know?

(Patient 19, housewife)

Your own clock says have a couple of nights off and just take it easy and don't go daft. Not by measuring units, more about how you feel really. Certainly for me it's just how I feel (agreement).

(Patient 16, company director)

When alcohol should be discussed in primary care

All nurses routinely asked patients about lifestyle issues, including alcohol consumption, in new patient registrations and certain clinics. Patients and health professionals agreed that screening was most appropriate in circumstances where questions were already asked about alcohol and where it was not the only focus for enquiry. Dedicated health screening or well man/woman clinics, which also covered smoking, weight, blood pressure, etc., were suggested opportunities for alcohol screening. Patients reported that they responded more positively to lifestyle enquiry and advice in these circumstances, because it was presented in a context in which they expected and wanted to be asked about behaviour such as smoking and drinking.

It would have to be a dedicated general health screening clinic; old-fashioned well-women and well-men clinics that people don't do so much now because the funding was withdrawn

to do them. And if you have this in a situation where, yeah it's great, the receptionists can give it to people who are targeted to come to the well-person clinic and then they know why they are coming and they come in and see [name of practice nurse]. There's a bit of time allotted to discussing this – it would initially be target population rather than blanket population.

(Professional 19, GP)

I wanted to get on to it [well-man clinic] because I wanted to be tested for all these things. So I was very glad to be there ... because if there's a problem I'd rather know about it sooner than later. It's good yes.

(Patient 14, business manager)

There was also broad agreement between patients and health professionals that it would *not* be appropriate to ask about alcohol unless it was part of a general health check or related to patients' presenting problems. However, nurses and GPs explained that raised blood pressure was a useful trigger for discussion of alcohol and other lifestyle issues even if patients did not realize that there was a link between hypertension and lifestyle behaviour. Thus some chronic health conditions provided a 'useful window of opportunity' to help patients reduce their consumption, especially if they returned for regular check-ups.

I think I would expect to fill it in (a questionnaire about alcohol consumption) at a registration unless I'd been going to the doctors and having some sort of continual problem where it might be an issue.

(Patient 4, community health worker)

If you'd gone in with a broken arm or something and you got handed something about alcohol, I don't think it would be relevant, so I wouldn't bother filling it in ... depends what you'd gone in for.

(Patient 9, student)

If you take somebody's blood pressure and it's raised, again go back to your lifestyle issues – are you smoking, do you drink, do you take exercise?

(Professional 37, practice nurse)

Someone comes in and you say oh by the way how much do you drink, it would be rather inappropriate and out of the way. Whereas other times you could just be generally chatting about what do you weigh now and what is your blood pressure. I think as soon as you've done blood pressure that's an entry point into all sorts of things.

(Professional 13, GP)

How alcohol should be discussed in primary care

The relationship between patients and health professionals was an important factor in the acceptability or otherwise of questions and advice about alcohol. Health professionals were anxious about offending patients by repeatedly asking about alcohol. However, patients who perceived they had a good rapport with a health professional, particularly if they had known them for a long time, generally said they did not mind being asked or advised about alcohol issues within an appropriate context.

You can put people's backs up if you keep harping on about it.

(Professional 1, GP)

It depends how well you know the patient as well. I mean if you've known them over several years, you know how you can talk to them.

(Professional 35, practice nurse)

He's the bloke [GP] that knows all your problems anyway, because he's got a big file, he knows what's been going on all your life anyway. He knows everything about you, he knows all the bad parts.

(Patient 8, student)

Most of the health professionals felt that patients would find it easier to discuss alcohol issues with a practice nurse, who was regarded more as a 'people's person', less formal than a GP and with more time to spend with patients. Conversely, the majority of patients felt they would initially go to their GP if they had any concerns about their drinking. Furthermore, most of the nurses felt 'overloaded' with new work, particularly smoking cessation programmes, making it difficult for them to also take on alcohol intervention.

It could be the nurse because they're not regarded as so authoritarian and people often

open up to them and generally go in for a chit-chat.

(Professional 31, GP)

If you've got a good doctor, I think that would be my first choice ... I suppose if it's a serious thing like alcohol, maybe the doctor would have more general experience, medical training.

(Patient 15, supervisor)

A lot of the burden would come down on the nurses (agreement). I don't know when they would do it. We'd just have to tack a few more hours on the end of the day because we're being asked to screen or to prevent so many things now.

(Professional 19, GP)

The need for additional support to carry out brief alcohol interventions was highlighted by both GPs and nurses, but there was disagreement as to whether this should be a trained primary care nurse or a specialist alcohol worker attached to the practice. Most patients felt it would be stigmatizing to see an 'alcohol worker' at the practice and that many would not make/attend such an appointment. One practice team suggested that a general 'lifestyle counsellor', trained in behaviour change and dealing with multiple lifestyle issues such as smoking and diet as well as alcohol, would be less threatening to patients and could take some of the workload from the practice nurses. Indeed, the idea of a lifestyle worker was positively received by most patients because it was not alcohol specific.

We need a lifestyle counsellor ... tobacco, alcohol, weight, exercise. And someone with an understanding of psychology. Set in the context of ischaemic heart disease, diabetes, lung cancer and other cancers. You need a resource. We could employ that person 5 days a week, from the time we opened to the time we shut.

(Professional 23, GP)

I wouldn't see the alcohol worker or the counsellor. That's just me, I don't know why. I was thinking, bloody hell, alcohol worker on the door and everyone's going to say he's going to the alcohol worker.

(Patient 16, director)

A lack of resources (including time, staff and space) and incentives were cited by health professionals as major barriers to brief alcohol intervention work. There were, however, differences in opinion about the use of financial incentives to encourage implementation. Some GPs reported that they valued evidence of intervention effectiveness above payment for clinical activity. Alcohol-specific training was identified by most nurses as the main incentive for brief intervention work.

Primary care is carried out by a whole host of professionals with various backgrounds, various training and mix of skills. And already we're trying to fulfil certain roles in an under-resourced environment ... So it's actually quite complex, lots going on and unless you actually understand that complexity and understand the pressures on everybody's time in primary care, I think you're always going to make the mistake of thinking that you can lump on an extra service and expect it to do well. It won't do well. It won't work unless time and provision is made for it.

(Professional 25, GP)

At the end of the day it does come down to feeling as if you're going to make a difference. Because, you know, even if you started chucking money at it I don't know that any of us would actually be financially orientated. It would be nice to have a sense if you achieved a target in how many people stopping drinking and you were able to add something to improve your services and the practice, that would be very nice. But I think that most people here, and you can shout me down on this if you want, I think most people here would do it anyway providing they felt it was going to be effective.

(Professional 14, GP)

A lot more people would like support and help but it isn't available. And I don't think, unless it's forced through the National Service Framework, and the PCGs will have to start to address it. And then the nurses would go off to train, they would then reimburse the practice. It would be all down to that. When push comes to shove, if the doctors get money we could do it; if they don't, forget it.

(Professional 39, Practice nurse)

Discussion

This study found widespread agreement between patients and primary care professionals that screening for alcohol-related risk and brief intervention to reduce alcohol-related harm was acceptable in contexts where patients expected such lifestyle focused activity (eg, new patient registration or chronic disease management) or where it was linked to presenting health problems. Integrating questions about alcohol with other lifestyle behaviour was also seen as a useful way of avoiding the potential sensitivity of this issue. Thus targeted approaches to the detection of alcohol-related risk, that is neither universal screening of all patients nor restriction to those seeking treatment for alcohol problems, appears to be feasible and acceptable to both patients and health professionals, and may resolve a debate about screening in the research community (Rollnick *et al.*, 1997; Beich *et al.*, 2002; Kelly, 2002). This targeted approach has also been recommended in the Alcohol Harm Reduction Strategy (Strategy Unit, 2004). However, since most brief intervention trials have been efficacy studies utilizing universal screening, pragmatic trials are needed to provide evidence for the effectiveness of such an approach in routine primary care.

Accurate identification of alcohol-related risk ideally requires the use of a validated screening tool, such as the Alcohol Use Disorders Identification Test (Saunders *et al.*, 1993) or its briefer variants (Bush *et al.*, 1998; Seppa *et al.*, 1998). Such a question-based approach is more accurate than biochemical markers and much less costly (Coulton *et al.*, 2006). Furthermore, the new General Medical Services (GMS) contract is encouraging a culture of routine data collection for the Quality and Outcomes Framework (QOF) (British Medical Association, 2003). Although alcohol is currently not an agreed indicator in the QOF, most general practice computer systems routinely collect alcohol consumption data in their templates. Adding a screening outcome, such as hazardous or harmful drinking, would only require a minor addition to current information systems.

Identification of alcohol-related risk is only a first step, clinicians also need to be able to undertake brief alcohol intervention and offer support for behavioural change. Professionals' uncertainty about the evidence relating to brief interventions in primary care reveals a need for more active

dissemination of this large body of research (Moyer *et al.*, 2002). Despite this, both health professionals and patients felt brief interventions would be useful for patients drinking slightly over recommended levels for whom only simple information about risk reduction was needed, and for those who were already thinking and perhaps worrying about their drinking.

In common with previous studies (Anderson, 1985; Kaner *et al.*, 1999), health professionals highlighted the need for additional support to carry out brief interventions, if widespread implementation was to be achieved. It is important to note that most patients felt that there would be a stigma associated with seeing an alcohol-specific worker in general practice. Patients also felt that the quality of their ongoing relationship with primary health care professionals was fundamental to the acceptability of advice about alcohol. Nevertheless, the concept of a generic 'lifestyle worker' in practices was positively received by many participants. This approach would be in line with recommendations in the recent White Paper 'Choosing Health' to provide NHS health trainers to advise and support lifestyle change (Department of Health, 2004). The introduction of such trainers could provide an opportunity for more widespread delivery of brief alcohol interventions in primary care in the future.

As things currently stand in England and Wales, a lack of resources and specific incentives for brief alcohol intervention remain as barriers to implementation. Recent research has reported that GPs already carry out many of the elements of brief intervention in routine practice (May *et al.*, 2006). Thus there is no requirement to introduce a new set of skills into primary care, rather we need to structure, enhance and extend what is already there. However, the continuing absence of alcohol indicators in the QOF provides little external encouragement for alcohol-related work by GPs and has led to concern that the GMS contract acts as a disincentive to alcohol work in primary care (Heath, 2004). This situation flies in the face of current health policy and needs addressing if we are to deliver the treatment targets outlined in the Alcohol Harm Reduction Strategy for England and help the general population to make healthier choices when drinking alcohol (Department of Health, 2004; Strategy Unit, 2004).

The findings reported in this study reflect the views of a small number of patients and health

professionals in the north-east of England, most of whom had not previously experienced an alcohol screening and brief intervention programme. Furthermore, although purposive and random-sampling techniques were used to identify participants, those that agreed to take part in the study may have differed in their views from those that refused. However, the validity of the study is enhanced by the multiple perspectives obtained across a wide range of participants in both patient and health professional groups, and the triangulation of findings using multiple methods of data collection.

Conclusions

This study provides evidence that a targeted approach to alcohol screening and intervention is more acceptable to patients and professionals in primary care than universal screening and would fit naturally with existing practice. However, uncertainty about the evidence of effectiveness and a lack of resources for brief alcohol intervention remain key barriers to its implementation. The lack of alcohol indicators in the QOF may act as a disincentive to alcohol-related work in primary care and undermines current health policy.

Acknowledgements

The authors are extremely grateful to Dr Katie Lock, Dr Penny Schofield and Dr Ray Lowry for their assistance in setting up and moderating focus groups; to the Steering Group members for their advice throughout the study; and to all the patients and health care professionals who participated.

Contributors: NH (Principal Investigator) and EK (Joint Principal Investigator) planned and designed the study. DH, ED and PP organized and carried out focus groups. DH and PC analysed the data. DH, PC, EK and NH drafted the paper and all authors contributed to revisions and the final version. EK is guarantor for the study.

Funding: The research described here was funded by a grant from the Alcohol Education and Research Council (R3/99). All contributors were independent of the funding body. EK holds a Department of Health funded NHS Primary Care Career Scientist Award.

Ethical approval: Ethical approval for the study was obtained from Newcastle and North Tyneside Joint Local Research Ethics Committee.

Competing interests: None.

References

- Anderson, P.** 1985: Managing alcohol problems in general practice. *British Medical Journal* 290, 1873–75.
- Beich, A., Gannick, D. and Malterud, K.** 2002: Screening and brief intervention for excessive alcohol use: qualitative interview study of the experiences of general practitioners. *British Medical Journal* 325, 870–72.
- Beich, A., Thorsen, T. and Rollnick, S.** 2003: Screening in brief intervention trials targeting excessive drinkers in general practice: systematic review. *British Medical Journal* 327, 536–40.
- British Medical Association.** 2003: *Investing in general practice: the new General Medical Services contract*. London: British Medical Association.
- Bush, K., Kivlahan, D., McDonell, M., Fihn, S. and Bradley, K.** 1998: The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. *Archive of Internal Medicine* 158, 1789–95.
- Coulton, S., Drummond, C., James, D., Godfrey, C., Bland, M., Parrott, S. and Peters, T.** 2006: Opportunistic screening for alcohol use disorders in primary care: comparative study. *British Medical Journal* 332, 511–17.
- Department of Health.** 2004: *Choosing health: making healthier choices easier. Public Health White Paper*. London: Department of Health.
- Funk, M., Wutzke, S., Kaner, E., Anderson, P., Pas, L., McCormick, R., Gual, A., Barford, S.** 2005: A multi country controlled trial of strategies to promote dissemination and implementation of brief alcohol intervention in primary health care: findings of WHO collaborative study. *Journal of Studies on Alcohol* 66, 379–88.
- Heath, I.** 2004: The cawing of the crow cassandra-like, prognosticating woe. *British Journal of General Practice* 54, 320–21.
- Heather, N., Dalloio, E., Hutchings, D., Kaner, E. and White, M.** 2003: Implementing routine screening and brief alcohol intervention in primary health care: a Delphi survey of expert opinion. *Journal of Substance Use* 9, 68–85.
- Heather, N. and Mason, P.** 1999: Generalist treatment and minimal intervention. In Raistrick, D., Hodgson, R. and Ritson, B., editors, *Tackling alcohol together: the evidence base for UK alcohol policy*. London: Free Association Books, 165–87.
- Kaner, E., Heather, N., McAvoy, B., Lock, C. and Gilvray, E.** 1999: Intervention for excessive alcohol consumption in primary health care: attitudes and practices of English general practitioners. *Alcohol and Alcoholism* 34, 559–66.
- Kelly, M.** 2002: Who sets the agenda? are opportunistic brief interventions for 'excessive drinkers' and patient centred care compatible? *Drugs: Education, Prevention and Policy* 9, 1–6.

- Lock, C., Kaner, E., Lamont, S. and Bond, S.** 2002: A qualitative study of nurses' attitudes and practices regarding brief alcohol intervention in primary health care. *Journal of Advanced Nursing* 39, 333–42.
- May, C., Rapley, T. and Kaner, E.** 2006: Clinical reasoning, clinical trials and risky drinkers in everyday primary care: a qualitative study of British general practitioners. *Addiction Research and Theory*, available from the author.
- Monteiro, M.G., and Gomel, M.** 1998: World Health Organisation project on brief interventions for alcohol-related problems in primary health care settings. *Journal of Substance Misuse* 3, 5–9.
- Moyer, A., Finney, J., Swearingen, C. and Vergun, P.** 2002: Brief interventions for alcohol problems: a meta-analytic review of controlled investigations in treatment-seeking and non-treatment-seeking populations. *Addiction* 97, 279–92.
- Office for National Statistics.** 2000: *Health survey for England 2000*. London: Office for National Statistics.
- Rehm, J., Room, R., Monteiro, M., Gmel, G., Graham, K., Rehn, R., Sempos, C. and Jernigan, D.** 2003: Alcohol as a risk factor for global burden of disease. *European Addiction Research* 9, 157–64.
- Ritchie, J. and Spencer, L.** 1994: Qualitative data analysis for applied policy research. In Bryman, A. and Burgess, R.G., editors, *Analyzing qualitative data*. London and New York: Routledge, 173–94.
- Rollnick, S., Butler, C. and Hodgson, R.** 1997: Brief alcohol interventions in medical settings: concerns from the consulting room. *Addiction* 5, 331–42.
- Rush, B., Urbanoski, K. and Allen, B.** 2003: Physicians' enquiries into their patients' alcohol use: public views and recalled experiences. *Addiction* 98, 895–900.
- Saunders, J., Aasland, O., Babor, T., De La Fuente, J. and Grant, M.** 1993: Development of the alcohol use disorders identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption – II. *Addiction* 88, 791–804.
- Seppa, K., Lepisto, J. and Sillanaukkee, P.** 1998: Five-shot questionnaire on heavy drinking. *Alcohol Clinical and Experimental Research* 22, 1788–91.
- Strategy Unit.** 2004: *Alcohol harm reduction strategy for England*, Strategy Unit, Cabinet Office.
- Wallace, P. and Haines, A.** 1984: General practitioner and health promotion: what patients think. *British Medical Journal* 289, 534–36.
- Wilk, A., Jensen, N. and Havinghurst, T.** 1997: Meta-analysis of randomized control trials addressing brief interventions in heavy alcohol drinkers. *Journal of General Internal Medicine* 12, 274–83.