

ORIGINAL ARTICLE

Implementing routine screening and brief alcohol intervention in primary health care: A Delphi survey of expert opinion

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Abstract

Aim To obtain a consensus of expert views on how best to implement screening and brief intervention (SBI) for excessive drinkers in a routine and enduring fashion in primary health care throughout England.

Method A Delphi survey of expert opinion in the UK.

Participants Seventy-nine experts in SBI, of whom 53 (67%) remained in round 3 of the survey. The expert panel included primary health-care professionals, alcohol-service workers and researchers/academics.

Measurements In round 3, 53 panel members (67% of an initial sample of 79) made ratings on a five-point Likert scale of 157 items developed from responses to open ended questions in round 1 and fed back with group median ratings derived from round 2. Consensus was defined as an interquartile range of ≤ 1 and attention was mainly directed to items with consensus around median responses of strong agreement or disagreement.

Findings A number of clear conclusions emerged from the survey, including the recommendation of routine screening confined to new patient registrations, general health checks and special types of consultation. The employment of a specialist alcohol worker as a member of the primary health-care team was strongly supported, but a model of interprofessional cooperation in the delivery of SBI could also be derived from findings. Other conclusions included the importance for the widespread implementation of SBI of a national alcohol strategy.

Keywords: *Excessive drinking, screening, brief intervention, primary health care, implementation, expert consensus.*

Introduction

There is good evidence that screening and brief intervention (SBI) delivered opportunistically in primary health-care (PHC) settings to patients drinking above

recommended levels of alcohol consumption (i.e. hazardous and harmful drinkers; Edwards et al. 1982) is effective in leading to reductions in drinking (Kahan et al. 1995, Moyer et al. 2002), with consequent benefits for patients and for public health, together with savings to health-care resources (Fleming et al. 2000, 2002). Unfortunately, there is also evidence that health-care professionals have been slow to incorporate brief interventions routinely in their work (Deehan et al. 1998, Kaner et al. 1999, Lock et al. 2002). What is clearly needed is the development of strategies aimed at overcoming the barriers to implementation that have been identified in research (e.g. Adams et al. 1997, Heather and Mason 1999, Kaner et al. 1999, Deehan et al. 2002, Roche et al. 2002) and at persuading health-care professionals to take up SBI as part of their day-to-day practice.

The research reported here forms part of the English arm of a WHO Collaborative Study entitled *Development of Country-wide Strategies for Implementing Early Identification and Brief Intervention in Primary Health Care* (see: <http://www.who-alcohol-phaseiv.net>), which itself represents Phase IV of a long-standing WHO Collaborative Project on *Identification and Management of Alcohol-related Problems in Primary Health Care* (Monteiro and Gomel 1998). A component of the study was the attempt to 'customize' SBI materials and methods to the conditions of PHC in each participating country. It was also aimed to adapt strategies for achieving widespread and enduring implementation of SBI to the cultural and socio-political circumstances of each country. In the English arm of the collaborative study (see: <http://www.alcohol-phaseivproject.co.uk>), the principal method used for these purposes was focus groups with health-care professionals and with patients (to be reported elsewhere), but a Delphi survey of expert opinion was also carried out with the aim of obtaining a consensus of expert views on how best to implement SBI for excessive drinkers in a routine and enduring fashion in PHC throughout England. This survey is the topic of the present paper.

The Delphi 'is a method for the systematic collection and aggregation of informed judgements from a group of experts on specific questions or issues' (Reid 1998, p. 231). A feature of the method is iteration with controlled feedback, which often takes the form of a statistical group response, usually a measure of central tendency. The normal practice is to feed back the full range of opinions or statements produced, with some indication of the strength of support for each, and to invite the expert panel to reconsider their responses on the basis of this information and in the interests of reaching consensus on the specific issues in question.

There are several advantages to the Delphi technique. One is that it allows respondents to remain anonymous and enables them to respond without the bias that can occur in other techniques, such as group discussions. This anonymity decreases the likelihood of socially desirable response sets and encourages refinement of opinion on critical topics. Moreover, discourse that might otherwise be logistically impossible due to the large geographical distances between respondents can occur in this method of study. It is, therefore, a relatively cost-effective way of collecting a consensus of opinions from a group of knowledgeable people without the difficulties of organizing acceptable times and venues. Fuller discussions of the Delphi technique may be found in Moscovice et al. (1988), Williams and Webb (1994), Jones and Hunter (1995) and Crisp et al. (1999).

Method

Sampling and recruitment

In the absence of databases containing lists of 'experts' in the field of SBI in PHC, extensive searches were made during April/May 2000 of Internet sites such as the National Research Register, Alcohol Concern, Medline, etc. Names were also taken from relevant research papers and project lists. A letter was sent to all individuals who were identified in this way, explaining the process of the Delphi survey and issuing an invitation to participate. A snowball sampling technique was used in which addressees were also asked to suggest others who might be interested in SBI in PHC, until saturation was reached. Invitation letters were sent to a total of 113 individuals, of whom 79 (70%) agreed to participate in the study, 13 (12%) declined the invitation and 21 (19%) did not reply.

Round 1

The first questionnaire consisted of the seven open-ended questions, which may be found in Table I. Question 7 was included to provide respondents with the opportunity to raise any additional issues that may not have been covered in the first six questions. A section was also included at the back of the questionnaire to allow respondents to provide additional comments or to raise further issues if they so wished. During August 2000, the questionnaire was sent with an accompanying letter and guidelines for completing the survey to all individuals who had agreed to take part.

Round 2

Preparation of the second questionnaire began shortly after round 1 questionnaires had been received, taking into account respondents' detailed comments. A total of 264 items were listed by respondents, and a content analysis was conducted to establish the main themes and corresponding items. After removing similar and redundant responses, the number of items was reduced to 157. In addition, there was considerable overlap in the responses given to the first two questions, and these were merged. To give the

Table I. Open-ended questions in round 1 of the Delphi survey.

No.	Question
1	What is the best way to identify risky drinkers in primary health care?
2	How could screening for risky drinking be carried out without offending patients, and how can patients best be encouraged to talk about their drinking?
3	What are the most effective and cost-effective types of brief intervention for risky drinkers in primary health care?
4	Which primary health care professionals should be involved in screening and brief interventions for risky drinking and what should their respective roles be?
5	How can primary health care professionals be encouraged to routinely deliver screening and brief interventions?
6	How can the concept of 'risky drinking' best be communicated to primary health care professionals and to the general public?
7	What do you consider to be the most important issues concerning screening and brief intervention in primary health care?

questionnaire more structure, question 6 (see Table 1) was divided into two separate sections, one addressing the general public and the other health-care professionals. Thus, the second questionnaire consisted of the eight sections shown in the headings of the Appendix, where all 157 items used in the survey may also be found.

Respondents were asked to agree or disagree with each item using a five-point Likert scale, with response categories ranging from '1' (strongly disagree) to '5' (strongly agree). After piloting, the second questionnaire was sent at the beginning of February 2001 to all individuals ($n=79$) who had initially agreed to participate.

Round 3

The responses to the second questionnaire were entered into SPSS. Amendments were made to the third and final questionnaire, which consisted of the same overall set of items as the second. During May 2001 this was sent to all individuals who had completed the second round of the study. The median response and the individual's previous response to each item were included on each questionnaire, and the panel was asked to re-rate each item in the light of the group response. If new ratings differed by more than one point from the median, respondents were encouraged to comment on their reasons for this at the end of the questionnaire.

Definitions

In interpreting ratings from round 3, items with an interquartile range of ≤ 1 were defined as having achieved *consensus*; an interquartile range of 0 was taken to indicate *high consensus* (cf. Fiander and Burns 1998, Jeffrey et al. 2000). In view of the large number of items reaching consensus as defined, attention was mainly directed to those with a consensus around a median value indicating 'strong agreement' (5) or 'strong disagreement' (1). Items with less than strong agreement or disagreement were sometimes included for illustrative purposes, as were some items that failed to reach consensus. In the discussion to follow, when an item is specified, it will be followed by parentheses containing two numbers (e.g. 1/5). The first of these numbers is the interquartile range (degree of consensus) obtained by the item and the second is the median value (degree of agreement/disagreement).

Results

Response rates

Sixty-two out of 79 (78%) respondents replied to the first questionnaire. Nonresponders ($n=17$) were followed up by telephone calls and emails. Contact could not be made with a small number ($n=4$) of nonresponders. Others stressed annual leave ($n=3$) and lack of time ($n=8$) as reasons for not returning questionnaires. The remaining nonresponders ($n=2$) felt that they did not have the relevant knowledge to complete the questionnaire. In round 2, 68 out of 79 (86%) questionnaires were returned, and nonresponders ($n=11$) were followed up. Contact could be made with only a small number of nonresponders ($n=5$), all of whom stressed lack of time as a reason for not replying. A total of 53 out of 68 (78%) respondents returned questionnaires in round 3, representing 67% of the

eligible sample of 79. Once again, lack of time ($n=11$) and annual leave ($n=4$) were given as reasons for not completing and returning the questionnaire.

Characteristics of expert panel

The final sample of experts was classified in the following self-reported occupations: Academic, 5; Researcher, 8; GP, 2; Nurse, 5; Alcohol Service Worker, 15; Director/Chief Executive, Alcohol Service, 4; Academic and GP, 3; Academic, Researcher and Alcohol Service Worker, 2; Trust Board Director, 2; Alcohol Specialist, 2; Nurse and Researcher, 1; Academic, Researcher and GP, 1; Chief Executive of Alcohol Service and GP, 1; Primary Care Trainer, 1; Consultant in Public Health, 1. Thirty-two (60%) were male and 21 (40%) female.

Ratings for round 3

Interquartile ranges and median ratings for 157 items are shown in the Appendix. For all sections of the Appendix, except Section D, items in bold are those that achieved a consensus as defined above, with those showing a high consensus listed first. Given the same interquartile range, items are listed in order of their median values. For Section D, on the roles of different health-care professions, items are listed in the order in which they appeared on the Delphi questionnaire for ease of comprehension.

Interpretation

Responses to each section of the questionnaire will first be summarized and interpreted, followed by a more general discussion of possible conclusions.

Section A. The best way to identify risky drinkers in primary health care without offending patients. The four items showing consensus around strong agreement (1/5; see Appendix) can be divided into two groups: (a) two statements endorsing screening in special circumstances, including new patient registrations, health and lifestyle reviews and special clinics where excessive drinkers are likely to be found or where they would be unlikely to object to screening (items 2 and 4); and (b) two statements endorsing training in risk factors and increased awareness of presentational factors associated with excessive drinking (items 3 and 5). In contrast to the first two of these items, statements endorsing routine and opportunistic screening of all patients (items 11 and 14) did not show consensus. There was a consensus that gathering information from partners and other family members (item 7), use of Liver Function Tests via blood tests (item 8) and detecting alcohol on patients' breath (item 9) were *not* to be recommended as methods of identification (all 1/2).

Section B. Patients can be encouraged to talk about their drinking by.... Three of the items with a consensus around strong agreement (items 21, 23 and 26; 1/5) reflect a wide acceptance of motivational interviewing principles or the negotiation rather than attempted prescription of behaviour change (Rollnick et al. 1993). Curiously, however, there was consensus but less agreement with 'using motivational interviewing techniques' (item 29; 1/4), which may have arisen from somewhat less enthusiasm for

motivational interviewing as a specific method of counselling. The other three consensual and strongly agreed statements (1/5) in this section endorse the value of training (item 22), giving patients enough time to discuss their concerns (item 24), and providing clear and concise information at the PHC level (item 25).

Section C. The most effective types of brief intervention for risky drinkers in primary health care. Only one item here received both consensus and strong agreement: 'Interventions tailored to individual patients' (item 41; 1/5). Although several types and characteristics of brief intervention (self-help booklets and manuals, drinking diaries and guidelines, follow-up monitoring appointments, brief advice, motivational interviewing techniques) received support (items 42–47; 1/4), no clear consensus emerged regarding the most effective types of brief intervention or their essential ingredients. In particular, there seemed to be no clear preference for either brief advice or more extended forms of intervention such as brief motivational interviewing (Rollnick et al. 1992).

Another item had high consensus around agreement: 'Intervention during special clinics or medical check-ups, e.g. well-man, well-woman, etc.' (item 39; 0/4). This is consistent with the consensus apparent from section A above, that screening should be confined to special clinics or medical check-ups.

Section D, Which primary health-care professionals should be involved in screening and brief intervention, and what should their respective roles be? There was a high consensus around strong agreement that counsellors (0/5) and Community Psychiatric Nurses (CPNs; 0/5) should be involved in SBI and also consensus and strong agreement that GPs (0.25/5) and practice nurses (1/5) should be involved. Interestingly, there was strong support for a role for dieticians in SBI (1/5). There was also strong support for the role of a specialist alcohol worker who is a member of the PHC team (1/5). Finally, there was strong support (1/5) for the idea that all PHC professions should be involved in SBI, while remaining aware of the circumstances in which referral to a specialist agency was called for. There was a consensus but less importance attached to the role of the district nurse (1/4).

With regard to the specific contributions of the various professions to SBI, the most obvious conclusion from these data is that there was very strong support (0/5) for the role of a specialist alcohol worker in carrying out brief intervention, support and monitoring, and onward referrals. Also strongly supported, but with somewhat less consensus (1/5), was the specialist worker's role in screening for excessive drinking. This last observation should be compared with the lack of support for 'assigning specialist alcohol workers' (2/3) in views on the best way to identify risky drinkers from section A.

Another obvious conclusion is that there was strong support (1/5) for the roles of practice nurses, CPNs and counsellors in all aspects of SBI – screening, brief intervention, support and monitoring, and referral. However, while there was strong support for the idea that GPs should be involved in screening and referrals (1/5), there was somewhat less agreement (1/4) regarding their role in brief intervention itself (1/4) and no consensus about their involvement in support and monitoring (2/4).

There was consensus and strong agreement that district nurses should be involved in screening (1/5) but no consensus regarding their role in other aspects of SBI (2/4). Conversely, there was strong support for the role of dieticians in brief intervention,

support and monitoring, and referral (all 1/5) but no consensus regarding their role in screening for excessive drinking (2/4).

Although there was nominal support for the idea that all PHC professionals should be involved in SBI (1/5), there was in fact little support in general for the roles of health visitors, midwives and family-planning staff. There was little enthusiasm for the role of receptionists in distributing screening instruments (2/3).

Section E. Primary health-care professionals can be encouraged to routinely deliver screening and brief intervention by.... A range of measures (items 69–80; 1/5) achieved consensus around strong agreement as means to encourage PHC professionals to deliver SBI routinely, without any of these clearly being singled out as more effective in this respect than the rest. However, several of these supported items were consistent with findings from previous sections of the questionnaire: item 69 regarding the role of the alcohol specialist worker; item 72 regarding the inclusion of questions about alcohol in general health and lifestyle reviews; and item 74 regarding the need for training in risk factors and brief intervention skills. Two other items (77 and 79) referred to the need for more education in alcohol-related issues. Two supported items (71 and 73) focussed on the need for support from specialist alcohol agencies, while two others (76 and 78) stressed the provision of evidence on the effectiveness and cost-effectiveness of SBI. Also endorsed was the need for a ‘clear referral protocol’ to assist PHC staff in SBI work (item 70) and a general change in attitudes toward alcohol (item 75). Lastly, the development of a National Alcohol Strategy was included in these strongly supported measures (item 80).

There was little consensual support for two measures that are sometimes proposed – adding alcohol to the GP contract (item 92; 2/4) and offering financial incentives for this work (item 94; 2/3) (cf. Deehan et al. 1997).

The strong disagreement with the statement that PHC professionals should not be encouraged to screen patients routinely (item 87; 1/1) seems, at first sight, inconsistent with the lack of support for the items (11 and 14) describing routine or opportunistic screening in section A. However, these latter items are concerned with opportunistic screening using standard questionnaires of all patients attending the surgery, not with routine screening as such. Thus, the consensus view could be interpreted as meaning that routine screening should be carried out for new patient registrations and at special clinics.

Section F. The concept of risky drinking can best be communicated to the general public via.... Three strongly supported measures (1/5) concerned the *content* of messages to the general public: ‘consistent risk messages, not just at Christmas’ (item 96); ‘using different information for different groups, e.g. young, pregnant’ (item 98); and ‘a new language away from “alcoholic”’ (item 100). The last suggestion is consistent with the idea that, to achieve widespread implementation, the general public’s understanding of alcohol problems needs to be reframed. A further eight items (101–108) were supported by the panel (1/4), including: ‘identifying and conveying the risks of drinking at different levels’ (item 101); ‘clear consistent information on government recommendations’ (item 103); ‘strong images and information on alcohol-related consequences’ (item 107); and ‘inclusion in HiMPS’ (Health Improvement Plans) (item 105).

Measures that failed to reach consensus included some that are frequently proposed as ways of educating the general public about the risks of drinking, for example using

celebrities (item 112; 1.75/4), public awareness campaigns (item 113; 2/4), warnings on alcohol advertising (item 114; 2/4), involving local community leaders and agencies (item 116; 2/4) and using pints, bottles, etc. as measures of alcohol consumption rather than standard units (item 117; 2/3).

Section G. The concept of risky drinking can best be communicated to primary health-care professionals via.... Four measures were strongly supported (items 118–121, 1/5) as ways in which the concept of risky drinking could be communicated to PHC professionals: improved training and education (item 118); clear and consistent information on government recommendations (item 120); ensuring that specialist services are sufficiently well resourced to enable them to develop direct relationships with primary care (item 121); and, once more, a National Alcohol Strategy sending a clear message (item 119).

It is perhaps surprising that utilizing Primary Care Groups/Primary Care Trusts (item 122), articles in health journals (item 123) and training packages (item 125) were seen as less important than the measures listed above. It should be emphasized, however, that these measures were consensually supported but around agreement rather than strong agreement (1/4).

It is also interesting that there was no consensus with respect to conferences, meetings, workshops and training sessions as ways of communicating the concept of risky drinking (item 127; 1.5/4). In view of data from section H below, this could be interpreted as meaning, not that training in SBI is unnecessary, but that the concept of risky drinking is already familiar to health professionals.

Section H. The most important issues concerning screening and brief intervention in primary health care. Four measures gained consensus and strong agreement (items 131–134; 1/5). The call for training in risk factors (item 132), a change in overall attitudes to drinking (item 134) and the prioritizing of SBI in a National Alcohol Strategy (item 133) are perhaps not surprising. However, the endorsement of ‘the need for realism all around’ (item 131) suggests that the panel was well aware that implementing SBI in PHC presents great difficulties and that expectations should not be set too high.

There was a large number of measures in section H (items 135–148) that obtained consensus but only around agreement rather than strong agreement (1/4; see Appendix). Again, it is perhaps surprising that some of these measures did not obtain greater agreement, but it should be emphasized that they *were* supported. There was a consensus but neither agreement nor disagreement (1/3) about the fact that patients do not like alcohol misuse entered in their records (item 150), the need for PHC professionals to address their own drinking (item 151), and the challenge from the drinks industry (item 153). There was no consensus about the importance of reaching binge drinkers (item 154; 2/4) and of not using brief interventions with patients who are alcohol dependent (item 157; 2/3), perhaps because it was thought by some experts that any intervention among such patients might be of benefit.

Discussion

It should first be noted that, on the whole, there was a high level of consensus among the experts who took part in this survey, as well as agreement or strong agreement with a

majority of items. It might thus be argued that, in this instance, the Delphi method was unable to show much discrimination among current views on SBI; perhaps, despite the anonymity of the survey, participants tended to give responses that were 'socially desirable' in the context of the current climate of scientific and professional opinion on SBI and expressed views they assumed would concur with the opinions of the researchers. On the other hand, it may simply be that, owing to frequent discussions and the large amount of literature on the topic, there is indeed relatively little disagreement among experts in the UK on the best ways to encourage implementation of SBI in PHC.

It will not be possible to comment on every conclusion that can be drawn from the extensive information gathered in this survey; only the more novel or important findings will be discussed, and the reader is advised to consult the preceding section for other findings. Taking the results listed above together, however, the following conclusions appear justified.

In extrapolation from the findings of randomized controlled trials of SBI, it has been assumed that practical delivery of SBI in PHC settings should follow a procedure in which all patients attending the PHC facility are screened, typically by a receptionist handing out the AUDIT questionnaire (Saunders et al. 1993) to patients on arrival, and that the GP or other health professional should then offer a brief intervention to all patients scoring positive for hazardous or harmful drinking. Rollnick et al. (1997) have questioned this model of delivery of SBI, and Beich et al. (2002), on the basis of focus groups with GPs in Denmark, have recently concluded that such blanket screening causes more problems than it solves and should therefore be abandoned. A clear conclusion from the present survey is that UK experts recommend a way of delivering SBI that is intermediate between these extremes; they were opposed to opportunistic screening of all patients, especially if involving receptionists handing out questionnaires, but were equally agreed that *routine* SBI should be carried out in special circumstances, i.e. new patient registrations, general health check-ups, and special clinics where excessive drinkers were likely to be found. For Accident and Emergency (A&E) settings, Huntly et al. (2001) have drawn up a list of the 'top ten' indications for the identification of excessive drinkers, and a similar list could usefully be provided for the PHC setting in clinical guidelines.

It could be objected that to restrict the delivery of SBI in this way might lose much of the public health impact that has been predicted from widespread implementation (e.g. Wallace et al. 1988). However, given the very low level of delivery of SBI at present (Deehan et al. 1998, Kaner et al. 1999), it would be preferable to make SBI more acceptable to PHC staff than to recommend a mode of delivery they are unlikely to find acceptable. It is arguable that, once routine delivery of SBI has been incorporated in a limited form, an expansion of range could then be envisaged.

Another clear conclusion from the survey is strong support for the employment of a specialist alcohol worker to carry the main load of work created by the delivery of SBI. The specialist worker should be an integral member of the PHC team. The findings suggest a model involving screening by other PHC staff, possibly in addition to screening by the specialist, followed by brief intervention, support and monitoring and onward referral to alcohol or addictions agencies where appropriate by the specialist worker. Wright et al. (1998) carried out an uncontrolled study on the effectiveness of a specialist 'alcohol health worker' in an A&E department, with encouraging results.

In circumstances where the employment of a specialist alcohol worker is not feasible, however, the findings suggest a model of interprofessional cooperation in the delivery of SBI. Views of the expert panel regarding the respective roles of the various professions can

be interpreted as follows: (a) screening for excessive drinking is carried out in appropriate circumstances by the GP, practice nurse, district nurse and counsellor; (b) referral of positive cases for brief intervention is made to the practice nurse, the counsellor or the dietician, with additional involvement by the GP or the health visitor given time and interest; (c) support and monitoring of the patient is carried out by the PHC staff member who gave the brief intervention; (d) onward referral is made by the same staff member, perhaps in consultation with the GP. A model of this kind could be incorporated into clinical guidelines for the delivery of SBI.

In common with many other recommendations regarding the implementation of SBI (e.g. Adams et al. 1997, Kaner et al. 1999, 2001, McAvoy et al. 1999, Aalto et al. 2001, Johansson et al. 2002), the expert panel stressed the need for increased and improved training and education of health-care professionals in skills related to SBI, particularly with regard to the recognition of risk and presentational factors, how to encourage patients to talk about their drinking, and other brief intervention skills. The panel also agreed that such training should emphasize the clear evidence that exists for the effectiveness and cost-effectiveness of SBI (Fleming et al. 2002, Moyer et al. 2002). However, there was no consensus in this survey as to the best methods for effecting training and education (cf. Albery et al. 1997, Deehan et al. 2002).

Experts showed broad agreement on the importance of principles bearing on the interaction between helper and patient derived from the motivational interviewing perspective (Miller and Rollnick 2002) and the idea that behaviour change should be negotiated with the patient rather than prescribed or imposed (Rollnick et al. 1993). Beyond that, however, there was no clear consensus regarding the form that brief interventions should take. This leaves open the possibility of recommending several options, differing perhaps in duration and the degree of training and skills needed, for the delivery of brief intervention.

Regarding communications with the general public, the panel stressed the importance of the government providing clear, consistent and relevant information on risks and developing different messages for different groups at risk, and of the need for a reframing of understandings of alcohol issues away from an exclusive preoccupation with 'alcoholism' and towards the concept of 'risky drinking'. A range of media was suggested for these purposes, including education in schools linked to smoking and sex education, mass media coverage, posters and leaflets in PHC practices, and free telephone information lines. PHC teams should take responsibility, in collaboration with health promotion specialists and others, for the local dissemination of the required information.

For communications with PHC professionals, besides improved training and education, the panel recommended that the government should provide clear and consistent information to professionals, stress the relevance of alcohol SBI to the PHC professionals' work, ensure that specialist services are sufficiently well resourced to enable them to develop direct relationships with primary care and use Primary Care Trusts for these purposes.

Despite recognizing the difficulties of implementing SBI in PHC and 'the need for realism all round', the panel saw a national alcohol strategy in which SBI played a prominent part as a crucial element of successful implementation.

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References

- Aalto, M., Petteri, P., & Seppa, K. (2001). Primary health care nurses' and physicians' attitudes, knowledge and beliefs regarding brief intervention for heavy drinkers. *Addiction*, *96*, 305–11.
- Adams, P. J., Powell, A., McCormick, R., & Paton-Simpson, G. (1997). Incentives for general practitioners to provide brief interventions for alcohol problems. *New Zealand Medical Journal*, *110*, 291–4.
- Albery, I., Durand, M., Heuston, J., Groves, P., Gossop, M., & Strang, J. (1997). Training primary health care staff about alcohol: a study of alcohol trainers in the UK. *Drugs: Education, Prevention and Policy*, *4*, 173–86.
- Beich, A., Gannik, D., & Malterud, K. (2002). Screening and brief intervention for excessive alcohol use: qualitative interview study of the experiences of general practitioners. *British Medical Journal*, *325*, 870–2.
- Crisp, J., Pelletier, D., Duffield, C., Nagy, S., & Adams, A. (1999). It's all in a name: when is a 'Delphi study' not a Delphi study? *Australian Journal of Advanced Nursing*, *16*, 32–7.
- Deehan, A., Templeton, L., Taylor, C., Drummond, C., & Strang, J. (1997). The effect of cash and other financial inducements on the response rate of general practitioners in a national postal study. *British Journal of General Practice*, *47*, 87–90.
- Deehan, A., Templeton, L., Taylor, C., Drummond, C., & Strang, J. (1998). Low detection rates, negative attitudes and failure to meet the 'Health of the Nation' alcohol targets: findings from a national survey of GPs in England and Wales. *Drug and Alcohol Review*, *17*, 249–58.
- Deehan, A., McCambridge, J., Ball, D. M., & Strang, J. (2002). Increasing practice nurse access to alcohol training. *Drug and Alcohol Review*, *21*, 281–6.
- Edwards, G., Arif, A., & Hodgson, R. (1982). Nomenclature and classification of drug- and alcohol-related problems: a shortened version of a WHO Memorandum. *British Journal of Addiction*, *77*, 3–20.
- Fiander, M., & Burns, T. (1998). Essential components of schizophrenia care: a Delphi approach. *Acta Psychiatrica Scandinavica*, *98*, 400–5.
- Fleming, M. F., Mundt, M. P., French, M. T., Manwell, L. B., Stauffacher, E. A., & Barry, K. B. (2000). Benefit-cost analysis of brief physician advice with problem drinkers in primary care settings. *Medical Care*, *38*, 7–18.
- Fleming, M. F., Mundt, M. P., French, M. T., Manwell, L. B., Stauffacher, E. A., & Barry, K. B. (2002). Brief physician advice for problem drinkers: long-term efficacy and benefit-cost analysis. *Alcoholism: Clinical and Experimental Research*, *26*, 36–43.
- Heather, N., & Mason, P. (1999). Generalist treatment and minimal intervention. In: Raistrick D., Hodgson R., Ritson B. (eds) *Tackling Alcohol Together: The Evidence Base for UK Alcohol Policy*. Free Association Books: London, pp. 165–87.
- Huntly, J. S., Blain, C., Hood, S., & Touquet, R. (2001). Improving detection of alcohol misuse in patients presenting to accident and emergency departments. *Emergency Medicine Journal*, *18*, 99–104.
- Jeffrey, D., Ley, A., Bennum, I., & McLaren, S. (2000). Delphi survey of opinion on intervention, service principles and service organisation for severe mental illness and substance misuse problems. *Journal of Mental Health*, *9*, 371–84.
- Johansson, K., Bendtsen, P., & Akerlind, I. (2002). Early intervention for problem drinkers: readiness to participate among general practitioners and nurses in Swedish primary health care. *Alcohol and Alcoholism*, *37*, 38–42.
- Jones, J., & Hunter, D. (1995). Consensus methods for medical and health services research. *British Medical Journal*, *311*, 376–80.
- Kahan, M., Wilson, L., & Becker, L. (1995). Effectiveness of physician-based interventions with problem drinkers: a review. *Canadian Medical Association Journal*, *152*, 851–9.
- Kaner, E. F. S., Heather, N., McAvoy, B., Lock, C., & Gilvarry, E. (1999). Intervention for excessive alcohol consumption in primary health care: attitudes and practices of English general practitioners. *Alcohol and Alcoholism*, *34*, 559–66.
- Kaner, E. F. S., Wutzke, S., Saunders, J. B., Powell, A., Morawski, J., & Bouix, J.-C. (2001). Impact of alcohol

- education and training on general practitioners' diagnostic and management skills: findings from a World Health Organization Collaborative Study. *Journal of Studies on Alcohol*, 62, 621–7.
- Lock, C., Kaner, E., Lamont, S., & 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.
- McAvoy, B., Kaner, E., Lock, C., Heather, N., & Gilvarry, E. (1999). Our Healthier Nation: are general practitioners willing and able to deliver? A survey of attitudes to and involvement in health promotion and lifestyle counselling. *British Journal of General Practice*, 49, 187–90.
- Miller, W. R., & Rollnick, S. (2002) *Motivational Interviewing: Preparing People to Change Addictive Behavior*, 2nd edn. Guilford: New York.
- Monteiro, M. G., & Gomel, M. (1998). World Health Organization project on brief interventions for alcohol-related problems in primary health care settings. *Journal of Substance Abuse*, 3, 5–9.
- Moscovice, I., Armstrong, P., Shortell, S., & Bennett, R. (1988). Health services research for decision makers: the use of the Delphi technique to determine health priorities. *Journal of Health Politics, Policy and Law*, 2, 388–410.
- Moyer, A., Finney, J., Swearingen, C., & 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.
- Reid, N. (1998). The Delphi Technique: its contribution to the evaluation of professional practice. In Ellis R. (ed.) *Professional Competence and Quality Assurance in the Caring Professions*. Chapman Hall: New York, pp. 230–41.
- Roche, A. M., Hotham, E. D., & Richmond, R. L. (2002). The general practitioner's role in AOD issues: overcoming individual, professional and systemic barriers. *Drug and Alcohol Review*, 21, 223–30.
- Rollnick, S., Heather, N., & Bell, A. (1992). Negotiating behaviour change in medical settings: the development of brief motivational interviewing. *Journal of Mental Health*, 1, 25–37.
- Rollnick, S., Kinnersley, P., & Stott, N. (1993). Methods of helping patients with behaviour change. *British Medical Journal*, 307, 188–90.
- Rollnick, S., Butler, C., & Hodgson, R. (1997). Brief alcohol interventions in medical settings: concerns from the consulting room. *Addiction Research*, 5, 331–42.
- Saunders, J. B., Aasland, O. G., Babor, T. F., de la Fuente, J. R., & 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.
- Wallace, P., Cutler, S., & Haines, A. (1988). Randomized controlled trial of general practitioner intervention with excessive alcohol consumption. *British Medical Journal*, 297, 663–8.
- Williams, P. L., & Webb, C. (1994). The Delphi technique: a methodological discussion. *Journal of Advanced Nursing*, 19, 180–6.
- Wright, S., Moran, L., Meyrick, M., O'Connor, R., & Touquet, R. (1998). Intervention by an alcohol health worker in an accident and emergency department. *Alcohol & Alcoholism*, 33, 651–6.

Appendix. Interquartile ranges and median values of all Delphi items

Item	Interquartile range	Median
<i>A. The best way to identify risky drinkers in primary health care without offending patients is by...</i>		
1. Providing a computer-based questionnaire for patients in the waiting area	0	3
2. Screening during new patient registrations and general health and lifestyle reviews	1	5
3. Being generally aware of underlying alcohol-related issues in physical/ psychological presentations, e.g. depression, anxiety, insomnia	1	5
4. Screening during special clinics or medical checkups, e.g. well-man, well-woman, diabetes, antenatal, insurance medical examinations, etc.	1	5
5. Training PHC professionals to recognize risk factors or signs of excessive drinking	1	5
6. Health promotion drives similar to smoking awareness campaigns	1	3
7. Gathering information from partners and other family members	1	2
8. Liver function tests via blood samples	1	2
9. Detecting alcohol on patients' breath	1	2
10. Conducting screening within an established relationship between patient and health professional	1.5	4
11. Routinely using an appropriate screening tool/questionnaire (e.g. AUDIT, FAST, CAGE, PAT, etc.)	1.5	4
12. Making self-assessment materials available	2	4
13. Taking and maintaining a history of alcohol intake for all patients	2	4
14. Opportunistically screening all patients attending the surgery	2	4
15. Asking patients to keep a drinking diary	2	3
16. Using health-promotion evenings	2	3
17. Assigning specialist alcohol workers	2	3
18. Using an established referral process	2	3
19. Paying GPs on the percentage of cases identified	2	2
20. Screening at specific primary care alcohol and drug clinics	2	2
<i>B. Patients can be encouraged to talk about their drinking by...</i>		
21. Avoiding labelling drinking as 'bad', i.e. adopting nonjudgemental language and attitudes at all times	0.5	5
22. Providing training to all PHC staff to enable them to be more confident about raising alcohol issues	1	5
23. Discussing the positive and negative aspects of drinking	1	5
24. Giving patients enough time to discuss their problems	1	5
25. Ensuring clear and concise factual information on alcohol is available at surgeries	1	5
26. Starting with the patient's own concerns	1	5
27. Keeping alcohol on the GP's agenda	1	4
28. Explaining the relationship between alcohol and the patient's health problems	1	4
29. Using motivational interviewing techniques	1	4

30. Talking about the part alcohol plays in the patient's life rather than concentrating on quantity consumed	1	4
31. Stressing confidentiality	1	4
32. Asking open questions		
33. Finding questions that patients would be willing to answer	1	4
34. Stressing that many people in the UK are risky drinkers	1	3
35. Using prominent publicity stating that health checks will include questions on alcohol	1	3
36. Asking patients' views on drinking and exploring using a joking style	1	2
37. Stressing that the aim is preventative and that the focus is on health and fitness	1.5	4
38. Starting conversations with nonsensitive topics until patients are at ease	2	4
<i>C. The most effective types of brief intervention for risky drinkers in PHC are...</i>		
39. Intervention during special clinics or medical checkups, e.g. well-man, well-woman, diabetes, antenatal, insurance medical examinations, etc.	0	4
40. A long-term package based on community care by primary health-care teams	0.5	3
41. Interventions tailored to individual patients	1	5
42. Drinking guidelines and use of drinking diaries (enough to enable informed choices to be made)	1	4
43. Provision of a self-help booklet/manual with information both factual and related to methods that can be adopted to assist behaviour change	1	4
44. Opportunity for 'checking in' at intervals to monitor success	1	4
45. Motivational interviewing techniques	1	4
46. Brief advice (5–30 min) aided by provision of a self-help book with useful tips and ideas, then follow-up to see if suggested action has been taken	1	4
47. Brief simple advice following routine use of an appropriate screening tool/ questionnaire (e.g. AUDIT, FAST, CAGE, PAT, etc.)	1	4
48. Providing a summary of evidence showing negative outcomes at levels patients are drinking at, with time for patient to reflect on the information and discuss thoughts about change	1	3
49. Cognitive-behavioural therapy	1	3
50. Goal negotiation consisting of three 10-min sessions	1	3
51. Feedback of liver function tests via blood samples	1	3
52. Variations on Motivational Enhancement Therapy	1.5	4
53. A referral to a specialist alcohol worker based in the surgery	1.5	4
54. The provision of factual information	2	4
55. Opportunistic intervention during routine consultations	2	4
<i>D. Which PHC professionals should be involved in screening and brief interventions for excessive drinking and what should their respective roles be?</i>		
56. GP:	0.25	5
Screening	1	5
Brief intervention	1	4
Support and monitoring	2	4
Referrals	1	5

57. Practice Nurse:	1	5
Screening	1	5
Brief intervention	1	5
Support and monitoring	1	5
Referrals	1	5
58. District Nurse	1	4
Screening	1	5
Brief intervention	2	4
Support and monitoring	2	4
Referrals	2	4
59. Health Visitor:	2	4
Screening	2	4
Brief intervention	1	4
Support and monitoring	1	4
Referrals	2	4
60. Midwife	2	4
Screening	2	4
Brief intervention	1	3
Support and monitoring	1	3
61. Dietician	1	5
Screening	2	4
Brief intervention	1	5
Support and monitoring	1	5
Referrals	1	5
62. Counsellor	0	5
Screening	1	5
Brief intervention	1	5
Support and monitoring	1	5
Referrals	1	5
63. CPN:	0	5
Screening	1	5
Brief intervention	1	5
Support and monitoring	1	5
Referrals	1	5
64. Family planning staff:	2	4
Screening	2	4
Brief intervention	2	3
Support and monitoring	2	2
Referrals	2	3
65. Receptionist:	1.75	3
Distribute self-assessment screening tools	2	3
66. All PHC professionals:	1	5
Screening and brief intervention, while also being aware of referral protocols to specialist agency	1	5
67. Specialist Alcohol Worker who is a member of the PHC team:	1	5
Screening	1	5
Brief intervention	0	5
Support and monitoring	0	5
Referrals	0	5
68. The role will depend on circumstances	2	4
<i>E. PHC professionals can be encouraged to routinely deliver screening and brief intervention by...</i>		
69. Designating PHC alcohol specialists to work alongside practices to provide supervision and support	1	5

70. Developing a clear referral protocol so that staff don't feel they have to deal with alcohol issues alone	1	5
71. Creating a solid and well-advertised support system	1	5
72. Including questions on alcohol consumption as part of general health and lifestyle reviews	1	5
73. Establishing closer liaisons with specialist alcohol agencies to assist with referrals and provide ongoing training and support	1	5
74. Training them in risk factors/signs and brief intervention skills	1	5
75. Bringing about a general change in attitudes towards alcohol	1	5
76. Providing evidence of the effectiveness of screening and brief intervention	1	5
77. Providing accredited postgraduate training courses and workshops	1	5
78. Providing evidence of the cost-effectiveness of screening and brief intervention	1	5
79. Teaching alcohol intervention work in medical schools	1	5
80. The development of the new National Alcohol Strategy by the Government	1	5
81. Providing easy-to-use screening tools	1	4
82. Convincing them of the value of their work	1	4
83. Allocating more time resources	1	4
84. Developing a computer-based screening protocol	1	4
85. Placing information in the surgery to tell patients that the health care professionals will routinely ask about alcohol consumption	1	3
86. Developing fixed period campaigns on alcohol issues with GP practices	1	3
87. They should <i>not</i> be encouraged to <i>routinely</i> screen patients	1	1
88. Emphasizing their role in the prevention of physical and psychological health problems	1.75	4
89. Evidence informing them that screening and brief intervention will lead to a reduction in their overall workload	2	4
90. Acknowledging that this a team effort	2	4
91. Constantly raising the issue until it is embedded in routine clinical practice	2	4
92. Adding alcohol to the GP contract	2	4
93. Weekly alcohol clinics	2	3
94. Financial incentives	2	3
<i>F. The concept of risky drinking can best be communicated to the general public via...</i>		
95. Controlled drinking packages via the Internet	0	3
96. Consistent risk messages, not just at Christmas	1	5
97. A National Alcohol Strategy sending a clear message	1	5
98. Using different information for different groups, e.g. young, pregnant, etc.	1	5
99. Work in schools linked to smoking and sex education	1	5
100. A new language away from 'alcoholic'	1	5
101. Identifying and conveying the risks of drinking at different levels	1	4
102. Media coverage	1	4
103. Clear consistent information on government recommendations	1	4

104. Clear factual information (posters, leaflets) in practices	1	4
105. Inclusion in Health Improvement Programmes (HiMPs)	1	4
106. Free telephone information lines	1	4
107. Strong images and information on alcohol-related consequences	1	4
108. Members of primary health-care teams to take responsibility for dissemination of information	1	4
109. Public debates/meetings	1	3
110. Using case studies as examples	1	3
111. Road shows	1	3
112. Using celebrities	1.75	4
113. Public awareness campaigns	2	4
114. Warnings on alcohol advertising	2	4
115. Leaflets in libraries, sports centres, etc.	2	4
116. Involving local community leaders and agencies	2	4
117. Using pints, bottles etc. as measures rather than units	2	3
<i>G. The concept of risky drinking can best be communicated to PHC professionals via...</i>		
118. Improved training and education	1	5
119. A National Alcohol Strategy sending a clear message	1	5
120. Clear consistent information on the government recommendations	1	5
121. Ensuring that the local service providers are sufficiently well-resourced to enable them to develop direct relationships with primary care	1	5
122. Utilizing PCGs/PCTs	1	4
123. Articles in health journals	1	4
124. Stressing the relevance to their work	1	4
125. Training packages – videos, books CD-ROMs	1	4
126. Direct communication between PHC professionals ensuring that alcohol features as an element in all priorities and discussions	1	4
127. Conferences, meetings, workshops and training sessions	1.5	4
128. Providing statistics on hospital admissions, street crime, domestic violence, etc.	1.5	4
129. Using pints, bottles, etc. as measures rather than units	1.5	3
130. Circulars	2	3
<i>H. The most important issues concerning screening and brief intervention in PHC are...</i>		
131. The need for realism all round	1	5
132. The need for training in risk factors and SBI	1	5
133. The National Alcohol Strategy making SBI a priority	1	5
134. A change in overall attitudes towards drinking	1	5
135. The need for a well-developed pathway to alcohol advice and services	1	4
136. Lack of resources – time and money	1	4
137. Showing PHC professionals the value of their work	1	4
138. Accessible screening tools and materials	1	4
139. The provision of evidence of effectiveness	1	4

140. Clear consistent information on government recommendations	1	4
141. Working with and helping families	1	4
142. Role adequacy and legitimacy	1	4
143. Ongoing recording, supervision and monitoring to measure the impact of SBI	1	4
144. Empowering patients by developing and using self-screening tools	1	4
145. The need for ongoing support for PHC professionals	1	4
146. The misuse of brief intervention as a panacea, i.e. should not be used as a complete response to people who have other mental health or social problems.	1	4
147. Training in motivational interviewing skills	1	4
148. The need to make SBI routine practice	1	4
149. The use of 7-day retrospective drinking diaries	1	3
150. The fact that clients don't like 'alcohol misuse' entered in their records	1	3
151. The need for PHC professionals to address their own drinking	1	3
152. The need to make blood testing equipment available	1	3
153. The challenge from the drinks industry	1	3
154. The importance of reaching binge drinkers	2	4
155. The essential need for a broader approach	2	4
156. Prevalence of the medical model in medical settings	2	4
157. Not using brief intervention with patients who are alcohol dependent	2	3
