Alcohol screening and brief interventions in primary care – Evidence and a pragmatic practice-based approach

CW Michael Tam, Andrew Knight, Siaw-Teng Liaw

Background

Risky alcohol drinking is a common problem in adults presenting in Australian general practice. Preventive health guidelines recommend routine delivery of alcohol screening and brief intervention (ASBI) by general practitioners (GPs). However, ASBIs have rarely been implemented successfully in a sustainable manner.

Objectives

In this article, we explain the current state of empirical evidence for the effectiveness of ASBI in primary care and describe a pragmatic interpretation of how this evidence applies to routine care.

Discussion

The empirical evidence surrounding ASBIs is complex. ASBIs are efficacious in research settings, but their effectiveness when compared with control interventions in real-world practice is less certain. Alcohol assessment within therapeutic doctor–patient relationships, rather than the specific formal tools, may be the 'active ingredient'. A pragmatic, practice-based approach to early detection of risky drinking is to focus on strategies that allow asking patients about their drinking more regularly, documenting it, and using quality improvement methodology to improve alcohol recording data completeness for the practice population.

Risky alcohol use is a problem in Australia. The general population has consistently perceived 'excessive alcohol consumption' as the 'drug of most serious concern'.[1] It is common – 30% of people aged 14 years or older are risky drinkers,[1] which represents 26% of adult patients in general practice.[2,3]

Alcohol screening and brief interventions (ASBIs) are recommended to be delivered by general practitioners (GPs).[4–7] The rationale is that if risky drinking is detected early, brief interventions can be delivered, and the burden of alcohol-related disease and injury in the population reduced.[8] With ASBIs recommended in routine practice, a basic empirical question must be answered: 'Do ASBIs work in general practice settings?'

The empirical evidence is complex

The 'definitive' reference often cited is the systematic review and meta-analysis by Kaner et al[9] published in the Cochrane Library. At face value, its findings are supportive of ASBIs. Participants who received ASBIs consumed, on average, four fewer standard drinks per week than the control group at one year follow-up.[9]

However, there are clinically meaningful uncertainties in these results, including a major sex difference. Men in the ASBI groups reduced their mean alcohol intake by six standard drinks per week, whereas women reduced their intake by only one standard drink per week.[9] Moreover, there was moderate heterogeneity – that is, there was a lack of consistency in the results of the individual studies in the meta-analysis,[10] even within the male and female subgroups.[9] The implication is that there are clinically important contexts that influence the effectiveness of ASBIs.

Efficacy versus effectiveness

The evidence base has been challenged recently by the publication of several large, pragmatic studies of ASBIs in general practice, which all found contrary results since the 2007 systematic review. Trials from Denmark,[11] England,[12] Wales,[13] the Netherlands,[14] and in a veterans affairs population in the US,[15] all demonstrated no or minimal effect of ASBIs, compared with the control intervention.

Recent academic commentary has recognised the issue of effectiveness, as opposed to efficacy. That is, even if ASBIs are efficacious in controlled settings, they might not be effective in real-world practice.[16–18] There remains disagreement as to whether ASBIs are effective in pragmatic practice. Some interpret the evidence firmly in the affirmative,[18–20] while others are more circumspect and trend towards the negative.[16,17,21]

© The Royal Australian College of General Practitioners 2016

'Active ingredient' of ASBI

An observation from the aforementioned pragmatic trials in general practice is that participants in the control groups, who received screening and usual care, had important reductions in risky drinking. The overall null result was the consequence of the control participants improving just as much as those who received the formal ASBIs package.[12–15] One encouraging interpretation of these findings is that the alcohol assessment process itself may be the 'active ingredient'. The effect of ASBIs may primarily be in encouraging individuals who are contemplating and able to reduce their drinking to do so.[12,18,22] This may explain why longer brief interventions are no better than shorter,[9] and why ASBIs are ineffective in people with more severe alcohol use problems.[23]

Making ASBIs acceptable

The research agenda has been committed to the universal application of ASBIs, and has tended to ignore GPs' clinical viewpoints.[24–27] Dismissing this collective wisdom may have been a missed opportunity. The average GP has many years of lived experience interacting with patients in real clinical situations. Universal ASBI is seen and experienced by GPs as impractical,[24,28,29] and implementation that is contingent on the rigid adoption of a tool is unlikely to be successful.[30] On the other hand, targeted screening[9,31] and pragmatic case finding[32] appear to be acceptable to GPs.

Patient perspectives, which inform when and how ASBIs could be acceptably performed, have also been undervalued.[27,30,33] Consultation contexts are important; for instance, patients' acceptance of alcohol assessment varied from essentially everyone in some situations (eg presenting for diabetes, hypertension and mental health), down to less than half in other situations.[33] New patient registration[31] and preventive health clinics[34] are other highly acceptable circumstances for alcohol assessment. Although alcohol discussions may not be welcome in a specific consultation,[30,34–36] patients see alcohol counselling as indicative of higher quality primary care.[37]

Pragmatic, practice-based approach to risky drinking early detection

Ask patients about their alcohol drinking more frequently

It is possible that a substantial component of the benefit of formal ASBIs in routine practice is from simply engaging patients in a discussion about their alcohol use, within the context of the therapeutic doctor–patient relationship. Using a formal screening instrument such as the AUDIT-C, a modification of the Alcohol Use Disorders Identification Test (Table 1),[38] with a structured brief alcohol intervention may provide an over-and-above effect,[19] but, pragmatically, only if it is performed.

GPs have found it difficult to implement screening questionnaires broadly in routine practice.[24,28,29] Simply asking all patients aged 15 years and older about their alcohol drinking more frequently is an important first step,[4] especially in addressing the under-detection of risky drinking.[39]

Focus initial changes on contexts that are highly acceptable to patients

A case is often made that although discussions on alcohol can be morally charged and uncomfortable for patients[30] and GPs,[24] the assessment should occur regardless. Pragmatically, interpersonal 'face work' preserves doctor–patient relationships[40] and needs to be acknowledged and respected. It may be better to go for the 'low-hanging fruit' first by targeting initial clinical behaviour change in presentation scenarios

Table 1. AUDIT-C questionnaire[38]

Questions	Score
How often do you have a drink containing alcohol?	
Never	+0
Monthly or less	+1
2–4 times a month	+2
2–3 times a week	+3
4 or more times a week	+4
How many standard drinks containing alcohol do you have on a typical day?	
1 or 2	+0
3 or 4	+1
5 or 6	+2
7 or 9	+3
10 or more	+4
How often do you have six or more drinks on one occasion?	
Never	+0
Less than monthly	+1
Monthly	+2
Weekly	+3
Daily or almost daily	+4

Risky drinker: Male – AUDIT-C ≥5; Female – AUDIT-C ≥4

© The Royal Australian College of General Practitioners 2016

where alcohol assessment has been demonstrated to be acceptable to most patients:[30,33]

- new patients
- health assessments and preventive health consultations
- chronic disease assessment and care planning (eg for hypertension, diabetes, gastro-oesophageal reflux disease)
- mental health assessment and care planning (eg for anxiety, depression)

Make use of strategies that improve patient acceptance of alcohol discussions

Patients' acceptance of alcohol discussions can be understood using a three-factor model.[30] A number of strategies can be considered by using this model (Table 2).

Use a whole-of-practice, quality improvement method

Approaching the issue from a whole-of-practice (compared with individual clinician) perspective might be an effective strategy. For instance, measuring alcohol recording data completeness (the proportion of the practice population with alcohol intake recorded in the electronic health record system) can be a useful statistic for driving change. For many practices, this metric can initially be surprisingly low.[41,42]

Quality improvement methodology may be well suited to changing practice systems[43] in implementing preventive care.[44] Previously, this has been disseminated in general practice through the Australian Primary Care Collaboratives Program.[45] In a nutshell, this method involves practice level agreement (using PDSA [plan, do, study, act] cycles) of:[44]

- goals – 'what do we set as our target for alcohol recording data completeness in the electronic health record?'
- measures – 'how often and how will these be discussed amongst the practice team?'
- changes – 'what are we going to attempt implementing?'

Discussion

There are few clinical fields where the apparent gap between evidence and practice is as wide as in ASBIs. The literature describes well-developed ASBI tools that few have been able to implement in regular practice.[27] However, the evidence suggests that the beneficial effects of ASBIs is not 'all or none'. At the individual practice level, the better implementation strategy may be to focus on asking patients about their drinking more regularly, documenting it, and using quality improvement methodology to improve data completeness for the practice population.

This approach fits better with the workflow of general practice and is perhaps philosophically better aligned with it. Early studies of GPs' beliefs and attitudes identified that GPs perceived managing drinking issues as a process of negotiation, over a long-term doctor–patient relationship.[26] Formal ASBIs are intensive, and may need to be supported by broader community and policy interventions to be sustainable and meet their theoretical potential.[18,21,29]

Authors

CW Michael Tam BSc (Med), MBBS, MMH (GP), FRACGP, Staff Specialist in General Practice, General Practice Unit, South Western Sydney Local Health District and Ingham Institute, NSW; Conjoint Senior Lecturer, School of Public Health and Community Medicine, UNSW Australia, Kensington, NSW. m.tam@unsw.edu.au

Andrew Knight MBBS, MMedSci, FRACGP, FAICD, Staff Specialist in General Practice
General Practice Unit, South Western Sydney Local Health District and Ingham Institute, NSW; Conjoint Senior Lecturer, School of Public Health and Community Medicine, UNSW Australia, Kensington, NSW

Siaw-Teng Liaw PhD, FRACGP, FACHI, FACMI, Professor of General Practice, UNSW Australia, Kensington, NSW; Director, General Practice Unit, South Western Sydney Local Health District and Ingham Institute, NSW

Competing interests: None.

Provenance and peer review: Not commissioned, externally peer reviewed.

References

1. Australian Institute of Health and Welfare. National Drug Strategy Household Survey detailed report 2013. Drug statistics series no. 28. Cat. no. PHE 183. Canberra: AIHW, 2015.
2. Britt H, Miller GC, Henderson J, et al. General practice activity in Australia 2013–14. General practice series no. 36. Sydney: Sydney University Press, 2014.
3. Britt H, Miller GC, Henderson J, et al. A decade of Australian general practice activity 2004–05 to 2013–14. General practice series no. 37. Sydney: Sydney University Press, 2014.

Table 2. Strategies to improve the acceptability of alcohol assessment

Model factor[30]	Strategies
The perceived relevance of the alcohol dialogue	• Establishing a clear reason for the alcohol discussion; for instance, explicitly linking alcohol use and the potential impact on the reason for presenting and any existing disease states • Using a health promotion framework (eg smoking, nutrition, alcohol, physical activity [SNAP])[7] in the discussion
Approach and language of the alcohol enquiry	• Using a collaborative consultation style, use of a friendly tone and avoid appearing interrogative • Negotiating the agenda of the consultation and respecting that patients might want their primary concern addressed first
Unease about the moral dimension of alcohol consumption	• Asking for permission and being sensitive that some patients may feel uncomfortable or unwilling to have these discussions • Using language pertaining to health risks, rather than moral language such as 'sensible drinker' and 'drinking in moderation'

© The Royal Australian College of General Practitioners 2016

4. The Royal Australian College of General Practitioners. Guidelines for preventive activities in general practice. 8th edn. East Melbourne, Vic: RACGP, 2012.
5. Moyer VA. Screening and behavioral counseling interventions in primary care to reduce alcohol misuse: U.S. preventive services task force recommendation statement. Ann Intern Med 2013;159(3):210–18.
6. National Institute for Health and Clinical Excellence. Alcohol-use disorders: Diagnosis, assessment and management of harmful drinking and alcohol dependence. London: NICE, 2011.
7. The Royal Australian College of General Practitioners. Smoking, nutrition, alcohol and physical activity (SNAP) – A population health guide to behavioural risk factors in general practice. 2nd edn. East Melbourne, Vic: RACGP, 2015.
8. Saunders JB, Aasland OG, Babor TF, de la Fuente JR, Grant M. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on early detection of persons with harmful alcohol consumption – II. Addiction 1993;88(6):791–804.
9. Kaner EF, Beyer F, Dickinson HO, et al. Effectiveness of brief alcohol interventions in primary care populations. Cochrane Database Syst Rev 2007(2):CD004148.
10. Higgins JP, Thompson SG, Deeks JJ, Altman DG. Measuring inconsistency in meta-analyses. BMJ 2003;327(7414):557–60.
11. Beich A, Gannik D, Saelan H, Thorsen T. Screening and brief intervention targeting risky drinkers in Danish general practice – A pragmatic controlled trial. Alcohol 2007;42(6):593–603.
12. Kaner EF, Bland M, Cassidy P, et al. Effectiveness of screening and brief alcohol intervention in primary care (SIPS trial): Pragmatic cluster randomised controlled trial. BMJ 2013;346:e8501.
13. Butler CC, Simpson SA, Hood K, et al. Training practitioners to deliver opportunistic multiple behaviour change counselling in primary care: A cluster randomised trial. BMJ 2013;346:f1191.
14. Hilbink M, Voerman G, van Beurden I, Penninx B, Laurant M. A randomized controlled trial of a tailored primary care program to reverse excessive alcohol consumption. J Am Board Fam Med 2012;25(5):712–22.
15. Williams EC, Rubinsky AD, Chavez LJ, et al. An early evaluation of implementation of brief intervention for unhealthy alcohol use in the US Veterans Health Administration. Addiction 2014;109(9):1472–81.
16. Saitz R. The best evidence for alcohol screening and brief intervention in primary care supports efficacy, at best, not effectiveness: You say tomato, I say tomato? That's not all it's about. Addict Sci Clin Pract 2014;9:14.
17. Clossick E, Woodward S. Alcohol brief interventions in general practice. British J Healthcare Management 2014;20(10):468–77.
18. O'Donnell A, Wallace PG, Kaner E. From efficacy to effectiveness and beyond: What next for brief interventions in primary care? Front Psychiatry 2014;5:113.
19. O'Donnell A, Anderson P, Newbury-Birch D, et al. The impact of brief alcohol interventions in primary healthcare: A systematic review of reviews. Alcohol 2014;49(1):66–78.
20. Heather N. The efficacy-effectiveness distinction in trials of alcohol brief intervention. Addict Sci Clin Pract 2014;9:13.
21. Nilsen P. Brief alcohol intervention – Where to from here? Challenges remain for research and practice. Addiction 2010;105(6):954–59.
22. Walters ST, Vader AM, Harris TR, Jouriles EN. Reactivity to alcohol assessment measures: An experimental test. Addiction 2009;104(8):1305–10.
23. Saitz R. Alcohol screening and brief intervention in primary care: Absence of evidence for efficacy in people with dependence or very heavy drinking. Drug Alcohol Rev 2010;29(6):631–40.
24. Tam CWM, Zwar N, Markham R. Australian general practitioner perceptions of the detection and screening of at-risk drinking, and the role of the AUDIT-C: A qualitative study. BMC Fam Pract 2013;14:121.
25. Rapley T, May C, Frances Kaner E. Still a difficult business? Negotiating alcohol-related problems in general practice consultations. Soc Sci Med 2006;63(9):2418–28.
26. Thom B, Téllez C. A difficult business: Detecting and managing alcohol problems in general practice. Br J Addict 1986;81(3):405–18.
27. Tam CWM, Leong LH, Zwar N. Let's listen to patients' and GPs' perspectives on alcohol-screening research. Aust Fam Physician 2015;44(6):427–28.
28. Beich A, Gannik D, Malterud K. Screening and brief intervention for excessive alcohol use: Qualitative interview study of the experiences of general practitioners. BMJ 2002;325(7369):870.
29. Johnson M, Jackson R, Guillaume L, Meier P, Goyder E. Barriers and facilitators to implementing screening and brief intervention for alcohol misuse: A systematic review of qualitative evidence. J Public Health (Oxf) 2011;33(3):412–21.
30. Tam CWM, Leong L, Zwar N, Hespe C. Alcohol enquiry by GPs – Understanding patients' perspectives: A qualitative study. Aust Fam Physician 2015;44(11):833–38.
31. Hutchings D, Cassidy P, Dallolio E, Pearson P, Heather N, Kaner E. Implementing screening and brief alcohol interventions in primary care: Views from both sides of the consultation. Prim Health Care Res Dev 2006;7(03):221–29.
32. Lid TG, Nesvag S, Meland E. When general practitioners talk about alcohol: Exploring facilitating and hampering factors for pragmatic case finding. Scand J Public Health 2015;43(2):153–58.
33. Tam CWM, Leong LH, Zwar N, Hespe C. Consultation contexts and the acceptability of alcohol enquiry from general practitioners – A survey experiment. Aust Fam Physician 2015;44(7):490–96.
34. Lock CA. Alcohol and brief intervention in primary health care: What do patients think? Prim Health Care Res Dev 2004;5(2):162–78.
35. Stott NC, Pill RM. 'Advise yes, dictate no'. Patients' views on health promotion in the consultation. Fam Pract 1990;7(2):125–31.
36. Nilsen P, Bendtsen P, McCambridge J, Karlsson N, Dalal K. When is it appropriate to address patients' alcohol consumption in health care – National survey of views of the general population in Sweden. Addict Behav 2012;37(11):1211–16.
37. Saitz R, Horton NJ, Cheng DM, Samet JH. Alcohol counseling reflects higher quality of primary care. J Gen Intern Med 2008;23(9):1482–86.
38. Bradley KA, DeBenedetti AF, Volk RJ, Williams EC, Frank D, Kivlahan DR. AUDIT-C as a brief screen for alcohol misuse in primary care. Alcohol Clin Exp Res 2007;31(7):1208–17.
39. Bryant J, Yoong SL, Sanson-Fisher R, et al. Is identification of smoking, risky alcohol consumption and overweight and obesity by general practitioners improving? A comparison over time. Fam Pract 2015;32(6):664–71.
40. Moriarty HJ, Stubbe MH, Chen L, et al. Challenges to alcohol and other drug discussions in the general practice consultation. Family Pract 2012;29(2):213–22.
41. Taggart J, Liaw ST, Yu H. Structured data quality reports to improve EHR data quality. Int J Med Inform 2015;84:1094–98.
42. Pringle M, Ward P, Chilvers C. Assessment of the completeness and accuracy of computer medical records in four practices committed to recording data on computer. Br J Gen Pract 1995;45(399):537–41.
43. Langley GJ, Nolan KM, Nolan TW, Norman CL, Provost LP. The improvement guide: A practical approach to enhancing organizational performance. San Francisco, CA: Jossey-Bass Publishers, 1996.
44. The Royal Australian College of General Practitioners. Putting prevention into practice – Guidelines for the implementation of prevention in the general practice setting. 2nd edn. South Melbourne, Vic: RACGP, 2006.
45. Knight AW, Caesar C, Ford D, Coughlin A, Frick C. Improving primary care in Australia through the Australian Primary Care Collaboratives Program: A quality improvement report. BMJ Qual Saf 2012;21(11):948–55.

correspondence **afp@racgp.org.au**

© The Royal Australian College of General Practitioners 2016