

SPECIAL SECTION : PREVENTION

Brief interventions: good in theory but weak in practice

ANN M. ROCHE & TOBY FREEMAN

National Centre for Education and Training on Addiction, Flinders University, Australia

Abstract

*A substantial body of research evidence has accumulated in support of the efficacy of brief interventions for a number of alcohol and drug-related problem areas, most notably alcohol and tobacco. This evidence has been used to exhort a range of professional groups such as general practitioners (GPs), and more recently emergency department hospital staff to engage in brief interventions. Internationally, however, these secondary prevention efforts have largely failed. Why have these proven interventions not been embraced by frontline workers? This is a little-asked question as efforts to press-gang unwilling professionals to take up the cudgel continue. This paper examines the characteristics of brief interventions and their principal delivery agents and explores reasons for the failure to move from efficacy to effectiveness. Given the prevention potential that rests with brief intervention, these are crucial questions to address. A key feature of brief intervention delivery also examined is the role of GPs versus the less well-explored option of the practice nurse. It will be proposed that perhaps we have the right vehicle but the wrong driver and that until closer scrutiny is made of this issue efforts in this key prevention area will continue to fail to achieve optimum results. [Roche AM, Freeman T. Brief interventions: good in theory but weak in practice. *Drug Alcohol Rev* 2004;23:11–18]*

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Introduction

Alcohol and tobacco are two of the greatest causes of preventable disease and death in Australia [1–3]. There is also a wide variety of harms associated with illicit drugs, including dependence, mental health problems such as temporary psychosis from amphetamine bingeing, and physical health risks such as the risk of blood-borne viruses from injecting drugs. Harms arising from licit and illicit drugs also contribute enormously to health-care costs in Australia [4].

A recent World Health Organization (WHO) survey of general practitioners (GPs) in 12 countries identified smoking and alcohol as two key prevention areas [5]. There is considerable scope for secondary prevention strategies such as early and brief intervention. Brief interventions are short sessions that aim to facilitate change in an individual's health behaviour, such as reducing alcohol or other drug consumption in those consuming at high risk levels or quitting smoking, and

are supported by a large literature on their efficacy and cost-effectiveness. Primary care has been identified as the appropriate setting for brief interventions, and GPs as the preferred delivery agent [6]. However, demonstration of effectiveness has been poor and GPs have generally failed to utilize brief interventions. This paper examines these issues in relation to the research evidence for brief interventions, for alcohol and tobacco most notably (as this is the area in which most research has been undertaken) but also in relation to the illicit drugs.

The historical context of brief interventions and secondary prevention

In the last 20 years there has been a radical shift in the approach to alcohol and other drug (AOD)-related problems [7]. The disease model of alcoholism and other drug dependence has been replaced with the concept of a continuum of use and misuse that

Ann M. Roche, Director, National Center for Education and Training on Addiction, Flinders University, Adelaide, Australia; Toby Freeman, National Centre for Education and Training on Addiction, Flinders University, Adelaide, Australia. Correspondence to Professor Ann M. Roche, Director, National Centre for Education and Training on Addiction, Flinders University, GPO Box 2100, Adelaide SA 5001, Australia.

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encompasses a greater proportion of the population and the largest proportion of harms [7–9]. For example, the majority of alcohol-related harms comes from moderate to low consumers of alcohol who occasionally drink at hazardous levels (i.e. ‘binge-drinkers’) [10–12]. With increased knowledge of factors that influence AOD-related harms, there has also been a gradual destigmatization of individuals with drug-related problems and greater access to a wider range of treatment options.

The result has been a shift in attention from treating solely dependent consumers at one end of the continuum to combined public health efforts in primary and secondary prevention targeting individuals at risk of acute harms [13]. This shift in orientation increased the scope for interventions at the secondary prevention level, and yielded research on early detection and screening. As duration of use necessary for the development of dependence usually involves months, if not years, of regular heavy use, there is opportunity to intervene effectively at early stages in a drug-using career. Even when dependence is not an issue (as is the case for most AOD use [14]), there is still considerable scope for brief intervention as a secondary prevention strategy to curtail or ameliorate harms associated with use.

The efficacy of brief interventions

A wealth of trials and meta-analyses indicate that brief interventions are efficacious as a secondary prevention strategy [15–18]. Brief interventions targeting alcohol consumption have been found to be very effective in changing clients’ consumption levels, with one meta-analysis [16] finding that heavy drinkers were twice as likely to lower their consumption 6–12 months after a brief intervention than heavy drinkers who received no intervention. A WHO study conducted in eight countries involving over 1600 participants found that brief interventions reduced daily alcohol consumption on average by 17% and intensity of drinking by 10% [19]. Brief interventions also reduce the number of alcohol-related problems [20], health-care utilization and associated treatment costs [21] and the number of emergency department admissions [22]. Brief interventions are also highly cost-efficient due to the minimal cost of the intervention and the breadth of scope for prevention of more serious and more costly problems [23]. Previous research has suggested that women do not receive the same benefits from brief interventions as men [18]. However, a recent meta-analysis indicates that there is no such gender specificity [24].

Brief interventions for tobacco cessation have also been found to be highly efficacious [25]. A recent review [2] found that GP interventions double the chance of quitting smoking, and are even more

successful when combined with pharmacotherapies such as nicotine replacement or bupropion. Such intervention from a GP can have successful effects, takes only a few minutes and has the capacity to prevent chronic tobacco-related illnesses, making it a highly cost-effective intervention [25,26]. GP intervention with smokers can also be encouraged by providing resources. McEwen, Preston & West [26] developed a desktop resource for GPs that almost doubled the rate of GP intervention with smokers.

Much less research has been conducted on the efficacy of brief interventions for illicit drug use. Saunders, Wilkinson & Phillips [27] found a brief motivational intervention for opiate users attending a methadone programme to be efficacious. At the 6-month follow-up, individuals who received the intervention were more committed to abstaining from their drug use, reported fewer drug-related problems, were more compliant with treatment and were slower to relapse. Brief intervention for cannabis use can reduce the number of reported dependence symptoms and cannabis-related problems, reduce consumption (on average to 30% of their baseline rate in one study [28]) and increase rates of abstinence [28,29]. Amphetamine users who receive brief interventions have been found to lower their daily consumption significantly, be more likely to abstain from use and report a reduction in crime and health problems [30]. Such randomized controlled trials indicate the global efficacy of brief interventions for illicit and licit drugs.

Failure in translating efficacy into effectiveness

Despite the extensive capacity of brief interventions for the prevention of serious AOD-related health problems, the effectiveness of brief interventions has not been demonstrated [7,31]. GP uptake of brief interventions has been poor [31,32]. Intervention rates for smoking cessation are also disappointingly low [26]; GPs have been found to offer only one-third of smokers assistance with smoking cessation [2]. Spandorfer, Israel & Turner [33] found that brief counselling interventions were the preferred treatment for individuals with alcohol-related problems for only 28% of physicians, with 72% preferring to refer the individual. Similarly, Roche, Guray & Saunders [34] found that most GPs preferred to refer opiate users, and were unwilling to intervene personally. Given the scope for secondary prevention that brief interventions offer, such poor utilization of brief interventions is cause for concern.

Detection and screening

A critical barrier to the implementation of brief interventions is the failure of GPs to screen and detect

individuals at risk of developing AOD-related problems. In a US sample, only one-third of GPs screened 80% or more patients for alcohol-related problems during annual visits [33]. GPs identify only approximately half the smokers in their practice, despite the relative lack of stigma surrounding smoking, and surveys of patients' views endorsing the role of the GP in aiding smoking cessation and providing advice [2]. This raises questions as to why GPs are not screening or identifying a larger proportion of their patients who are using alcohol, tobacco or other drugs. Holmwood [35] argues that GPs may not have the capacity to address AOD use adequately, as these issues must compete with other, more traditional prevention areas such as high blood pressure, diabetes and breast and cervical cancer.

As a consequence of these low rates of screening researchers have attempted to develop very short but accurate tools that allow GPs or other health professionals to assess use or severity of dependence on a particular drug. These tools are brief measures that can be completed in short consultations and can then allow the health professional to provide a brief intervention or referral. The Alcohol Use Disorders Identification Test (AUDIT) is an accurate predictor of future alcohol-related harm, including illness, hospitalization and social problems [36]. For tobacco, the two-item Heaviness of Smoking Index (HSI) has robust reliability and validity [37]. There are relatively few screening tools designed for drug use other than alcohol and tobacco [37]. The ASSIST (Alcohol, Smoking and Substance Involvement Screening Test) is the most comprehensive measure of drug use [38], measuring alcohol, tobacco and prescription drugs as well as illicit drugs.

GPs operate under very tight time constraints during consultations. As a response to this shorter versions of screening tools have been developed, such as the four-item measure FAST, a shortened version of the AUDIT, which retains a sensitivity of more than 90% for alcohol problems [39], and the AUDIT-3 and AUDIT-4, which were found to be as effective as the 10-item AUDIT [40]. However, the main advantage of the FAST is that one question ('How often do you have eight or more drinks in one occasion?' for men and 'How often do you have six or more drinks in one occasion?' for women) can act as a filter for further questions. The FAST can categorize over 50% of individuals with an accuracy of over 95% based on this first question alone. Such short, accurate measures allow GPs or other health professionals to determine very quickly whether the individual may benefit from a brief intervention.

However, there are other barriers to GP uptake of screening tools. Pen-and-paper screening tools are generally not part of standard clinical protocols or GP

culture, where the emphasis in diagnosis centres much more around empirical observation and verbal questioning about symptoms. This is reflected in the finding that when GPs screen individuals, they are more likely to ask questions regarding quantity and frequency of use rather than employing screening tools [33]. The use of computers to deliver screening tools is a viable alternative to pen-and-paper questionnaires, and has been found to be acceptable to patients [41]. Computerized screening may offer other benefits, such as greater validity through more anonymity and automated filtering questions based on responses (which may reduce greatly any difficulties associated with more complex screening tools such as the ASSIST) [41].

Additional barriers to GP screening and intervention

Several other situational and attitudinal barriers to screening or intervention have been noted in the literature. These include some GPs feeling that responding to AOD issues is not a legitimate part of their work [42–44], reflected in a fear of losing patients [45] and finding it difficult to raise the topic during consultations [45,46].

Having negative attitudes towards individuals with AOD problems may also act as a barrier to GPs intervening in AOD issues [42,47]. Surveys of attitudes among GPs identify common feelings that clients with AOD-related problems can be difficult, aggressive, demanding, manipulative, deceitful, unmotivated and unwilling to change [48–53], and such attitudes are often given as reasons for not responding to clients with AOD-related issues [49,54].

Some GPs also report the common feeling among health professionals that there is nothing they could do to help a person with an AOD-related problem [45,47]. This 'therapeutic nihilism' concerning alcohol and drug-related problems has been identified in the literature as a common barrier to intervening with clients with AOD problems [34,42], despite findings that interventions with clients with AOD problems are of comparable efficacy to interventions for other chronic diseases such as diabetes, hypertension and asthma [55].

Another common theme in the literature is an expression by GPs of a lack of confidence, skills and abilities to intervene in AOD issues [49,56,57]. Surveys of GPs often indicate that only a quarter or less of GPs are confident in dealing with clients with illicit drug-related problems [49,56,58] while rates for clients with licit drug-related problems (smoking, tobacco and benzodiazepines) are typically substantially higher [49]. While education and training may help increase skills and feelings of confidence, it is a lack of time, faculty expertise, training sites and institutional support

that have been noted as major barriers to the education of GPs in AOD issues [59].

Improving the effectiveness of brief interventions

The public health strategies needed to address AOD-related harms may be more suited to primary health-care than primary care. Primary care incorporates general practice, and is orientated towards early detection and effective treatment of diseases [60]. Primary care focuses on the time-limited management of a specific illness or condition, rather than more extensive care. Primary health-care, however, is broader than primary care, includes health promotion strategies and more extended, ongoing treatment of health problems, and is more orientated towards public health [60]. Hence, it is increasingly speculated that primary health-care, of which practice nurses are a part, may be more suited to the secondary prevention of AOD-related harms.

GPs are a valuable resource in secondary prevention, and strategies are still needed to target GPs' engagement of AOD prevention. Recent research has found that professionally and organizationally based support interventions for GPs can increase their rates of screening and providing brief interventions [61,62]. These strategies need to be pursued concurrently with finding new avenues to deliver screening and brief interventions to individuals at risk of AOD-related problems.

A role for practice nurses?

The National Workshop on Practice Nursing in Australian General Practice definition of the role of the practice nurse is to 'enhance the quality and delivery of health care by providing nursing services in the context of general practice' [63]. These services include triage, assessment, therapeutic care and treatment, diagnostic services, clinical data management and health promotion and education. Furthermore, practice nurses may support management of chronic diseases such as diabetes and asthma, employ prevention strategies and conduct public health activities [63].

Practice nurses are now a substantial element of primary health care in the United States, Canada, New Zealand and the United Kingdom [64,65]. Practice nurses have been employed throughout Australia, and tend to work in the larger practices and more rural locations [65]. Urban employment of practice nurses is less common, except in areas where the HIV/AIDS case-loads are particularly high [65]. In 2001, the Commonwealth government committed \$104.3 million over 4 years for general practice to employ practice nurses, including \$12.5

million for training and professional support [66]. Hence, Australia will probably see a large rise in the number of practice nurses employed in general practice.

The benefits of practice nurses

Research on the benefits of practice nurses began over 35 years ago [67] (cf. Lewis & Resnick, 1967). The US Department of Health and Human Services argue that practice nurses 'excel in providing preventive care, counselling, patient education, management of chronic illness, and follow up care' [68]. Practice nurses are also very cost-effective, as practice nurse interventions cost between 10% and 42% less than physician interventions, while still delivering the same quality of health care [68]. In the United States and the United Kingdom patients have indicated a high level of satisfaction with practice nurse interventions, suggesting that patients support the legitimacy of the role of practice nurses in delivering health services [69,70]. Norman [71] argues that nurses' code of ethics encourages nurses to reduce the fear of presenting drug users by displaying a caring attitude and focusing on the dignity and worth of the patient, and building rapport and credibility with the patient.

Polydrug use and comorbidity issues highlight another potential advantage of targeting and training practice nurses to intervene in alcohol-related issues. The National Survey of Mental Health and Well-Being found that 51% of individuals who met the criteria for alcohol dependence were also using other drugs, most commonly tobacco and cannabis [72]. Furthermore, 15% of individuals who met the criteria for alcohol dependence also met the criteria for cannabis dependence and a further 7% met the criteria for dependence on another drug. Gossop, Marsden & Stewart [73] found that 27% of misusers of other drugs are dependent on alcohol. Other reports have found that up to 50% of drug misusers have problematic alcohol use [73]. Comorbidity of alcohol or drug problems and mental illness is also a widespread problem. It is estimated that 25% of people with a mental illness also experience problematic alcohol or other drug use [74]. The National Survey of Mental Health and Well-Being found that 20% of individuals with alcohol dependence met the criteria for an anxiety disorder, and 24% met the criteria for an affective disorder [72]. The additional training that polydrug use and comorbidity necessitate may be difficult to deliver to GPs due to time constraints and stronger competing education and training needs. It is not yet known whether practice nurses are in a more flexible position to receive this training, or whether they can increase the capacity of the practice to respond to AOD issues.

Using practice nurses to employ brief interventions: the precedent

The possible role of practice nurses in intervening with individuals at risk of AOD-related harms has perhaps been recognized most in the United Kingdom. Initiatives such as the Nursing Council on Alcohol's programme targeting alcohol consumption [75] have resulted in substantial research into screening and interventions by practice nurses. Several studies in the United Kingdom show that practice nurses are well placed to screen clients and provide brief interventions [76–78]. Practice nurses have also been found to be more likely than GPs to use screening tools to assess alcohol consumption and detect individuals whose alcohol consumption had not yet caused them problems, whereas GPs are more likely to detect self-presenting individuals who may already be dependent on alcohol [79]. Identifying individuals not yet presenting with alcohol-related harms provides the best opportunity to reduce alcohol-related harms and to prevent the emergence of more severe problems. Because brief interventions have been found to be more effective for individuals with mild to moderate alcohol-related problems [16], these individuals are also likely to receive the greatest benefits from brief intervention.

However, despite greater efforts in screening and detecting individuals at risk for alcohol-related harms, practice nurses in the United Kingdom still rarely provide brief interventions targeting alcohol consumption, and are more likely to refer the individual to the GP [77–79]. Two substantial barriers to practice nurses providing brief interventions have been identified: a lack of training for alcohol-related issues, and poor role definitions of practice nurses. Lock and colleagues [77] found that most practice nurses in the United Kingdom had received little or no training in alcohol interventions and the need for less haphazard, more formal training in such issues has been stressed in the literature [78]. In a survey of 97 practice nurses, 70% wanted further training before participating in alcohol interventions, indicating a desire to help in alcohol-related issues, but a deficit in training [76]. In the United Kingdom the role definition of practice nurses has lacked clarity, resulting in unclear relationships between practice nurses and GPs. Role ambiguity particularly centres around practice nurses' delivery of health services, where this is seen often as more the role of the GP [65].

The generalizability of the research on practice nurse-led brief interventions in the United Kingdom to the Australian setting is not known. This highlights one area of possible examination in a future research agenda. Given the possibility for practice nurses to make a sizeable contribution to secondary prevention of

AOD-related problems through screening and brief intervention, further investigation into the barriers, efficacy and the potential for uptake of this approach is warranted. Future research may assess whether the acceptability of practice nurse-led brief interventions meets with the same client support as in the United Kingdom, whether practice nurses are willing to respond to clients with AOD-related problems and have the support resources to do so, and whether they are in a position to receive training on responding to AOD issues.

The example of practice nurse interventions in alcohol-related problems demonstrates that high levels of screening and interventions in AOD-related problems by practice nurses in Australia is potentially achievable. There are efforts in Australia to minimize role ambiguity among practice nurses, such as the National Workshop on Practice Nursing in Australian General Practice [63]. If work force development in the AOD field focuses on ensuring high levels of formal training for practice nurses on screening and intervening with individuals at risk of AOD-related harms, then Australia may foster a work force of practice nurses who are well-trained and well-placed to screen and provide brief interventions for such individuals. In addition, the role of practice nurses in managing AOD issues could include detoxification, relapse prevention and the management of substance use in adolescents and pregnant women [80].

Conclusion

Brief interventions have a proven efficacy in reducing AOD consumption among individuals at risk of AOD-related problems. Although GPs have been the preferred delivery agent, GP uptake of brief interventions has been modest. Short, easily administered screening tools, such as the FAST, have been developed to facilitate detection of individuals at risk of AOD-related problems. However, such tools may not fit well into the existing GP culture based around observation of symptoms and verbal questioning. Other barriers to GP implementation of screening and brief interventions found in recent research include feeling that it is not a legitimate part of their work or that there is nothing they could do to help individuals with AOD-related problems, negative attitudes towards individuals who use alcohol or other drugs, and a lack of confidence, skills and abilities in responding to AOD issues.

It is suggested here that, in addition to pursuing strategies to improve GPs' uptake of brief interventions, practice nurses could be examined as alternative delivery agents. Screening and delivering brief interventions for AOD consumption is consistent with the role of the practice nurse, and interventions from

practice nurses are likely to be more cost-effective than GP-led interventions. Research in the United Kingdom indicates that patients support practice nurse-led interventions and that practice nurses are more likely to detect individuals at risk of AOD-related problems. Further research is warranted to examine the possible effectiveness of practice nurse-led brief interventions for AOD use in Australia.

Taylor and Pultz [80] argue that establishing a practice nurse model of care for AOD issues should be a priority for work-force development in the AOD field in Australia. Given the Commonwealth funding committed to the employment and training of practice nurses, it is vital for the AOD field to take this opportunity to implement practice nurse utilization of screening and brief interventions for AOD-related problems. Practice nurse-led brief interventions for risky alcohol and drug consumption provide great capacity for the prevention of serious harms, and taking this opportunity would result in great benefits for at-risk individuals.

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