

# Does follow-up telephone support encourage general practitioners to continue using an alcohol screening and brief intervention programme?

Ross McCormick, Professor, Division of General Practice and Primary Health Care; Grant R Paton-Simpson, Senior Researcher, Clinical Information and Research Unit, Regional Alcohol and Drug Services, Auckland; Ann Powell, Research Fellow, Division of General Practice and Primary Health Care; Peter Adams, Senior Lecturer, Discipline of Applied Behavioural Science, University of Auckland; Dean Bunbury, Research Officer, Division of General Practice and Primary Health Care

*This paper is the last to be written by the Auckland World Health Organisation study team on screening and brief intervention for problem use of alcohol. It is inappropriate to single out any one author for this five year long team project which, in collaboration with centres in Europe and Australia, has led to increased understanding by government organisations and general practice of the spectrum of alcohol use, principles of screening and brief intervention for risky and problem use of alcohol, the barriers to general practitioners implementing new technology and methods of overcoming these barriers.*

## ABSTRACT

### Aim

To evaluate the effectiveness of ongoing telephone support to encourage longevity of screening and brief alcohol intervention by general practitioners.

### Method

A randomised trial of an initial training session about screening and brief alcohol intervention with regular follow-up telephone calls versus the initial training session alone to 68 New Zealand general practitioners.

### Results

Sixty-eight general practitioners implemented the Drinkless screening and brief alcohol intervention programme, screening a total of 15 103 patients. Ongoing telephone contact did not appear to improve the implementation measures by New Zealand general practitioners.

### Conclusion

Similar studies in Australia and England reported higher implementation rates with telephone follow-up support, but only to approximately the level achieved in this study. Clearly the effect of follow-up telephone contact was not large enough to make a difference in this sample in the New Zealand context. Provided our interpretation of this study was not subject to error because of the small number of practices involved, this raises a suspicion that New Zealand general practitioners may differ from their overseas counterparts and casts doubt on the cost effectiveness of telephone follow-up in the local context.

(NZFP 2001; 28:334–337)

### Keywords

alcohol, screening, brief intervention

At risk alcohol use in the non-dependent population refers to “a level of alcohol consumption or pattern of drinking that is likely to result in harm should present drinking patterns persist”.<sup>1</sup>

The general practice setting is a

potentially valuable point of contact for delivery of health education/promotion and brief intervention for harmful and at risk alcohol use because of the large proportion of the population who are seen by general

practitioners. Furthermore, in general, patients believe they should receive preventive lifestyle advice from their general practitioner.<sup>2,3</sup>

Over recent years the evidence for the efficacy of brief intervention for

at risk use of alcohol has mounted.<sup>1,4,5</sup> A screening and brief intervention package for use by general practitioners has been developed entitled "Drinkless". This package was modified by Gomel<sup>6</sup> using focus group discussions and piloting with general practitioners from materials used in the WHO study on the effectiveness of brief interventions.<sup>4</sup> The Drinkless package includes information for the doctor and receptionist, patient booklets, the "Alcohol Use Disorders Identification Test" (AUDIT) alcohol screening questionnaire<sup>7</sup> and a scoring template to enable rapid assessment. A standard process ensures waiting room screening of every patient 16 years of age and over. An at risk patient is defined as one scoring eight or more on the AUDIT.

The 1991–2 WaiMedCa study<sup>8</sup> of general practitioner behaviour including consultation diagnoses found 4.4% of consultations performed by general practitioners were categorised as psychological but did not specifically identify alcohol and drug problems as reasons for patient encounters with general practitioners. As part of a World Health Organisation collaborative project the authors have previously explored the incentives and disincentives for general practitioners providing interventions.<sup>9,10</sup> We have also reported the problem drinking profiles of patients presenting to general practitioners,<sup>11</sup> and the results of a comparison of three marketing strategies (mail, telephone, or personal contact) designed to encourage general practitioners to receive a screening and brief intervention package for problem use of alcohol.<sup>12</sup>

Research findings are of little benefit to patients or to society if they do not reach the practitioner and if they are not implemented in practice.<sup>13</sup> Kaner et al<sup>14</sup> in an English study of 128 general practitioners reported that training and fortnightly telephone con-

tact statistically improved implementation measures for screening and brief intervention for risky and problem use of alcohol. Gomel et al<sup>15</sup> in an Australian study of 161 general practitioners showed improved implementation measures for training and fortnightly telephone contact and for training and follow-up site visits. The aim of our study was to examine the effect of ongoing telephone support to encourage longevity of utilisation of the Drinkless package in the New Zealand context.

## Methods

The subjects for this study were 68 general practitioners who received the 'Drinkless' screening and brief alcohol intervention package in our previous study of various marketing strategies,<sup>12</sup> who then agreed to utilise the Drinkless package, and who provided a complete dataset. The marketing study was based on a sample of 369 general practitioners obtained by random selection from a database maintained by the General Practice and Primary Health Care Division, University of Auckland of the then just over 900 general practitioners in the Auckland region. The sample size was chosen to be sensitive to a 20%

difference in uptake rates between any two conditions at a 5% level of significance. A maximum of one general practi-

tioner was selected from each practice. Of the group of 369 general practitioners, 237 agreed to receive the 'Drinkless' package and 96 agreed to utilise it. Of the 96 general practitioners indicating a willingness to utilise, 83 started using the package and 15 dropped out during the study.

The 96 general practitioners were randomly divided into 48 receiving the 'Drinkless' package with an initial half-hour face-to-face training session but no ongoing support, and an intervention group of 48 receiving both the initial training session plus ongoing sup-

port and advice on how to deliver the intervention via fortnightly telephone calls throughout the three-month study.

In each group the general practitioner and their receptionist each completed a self administered quantitative questionnaire before beginning to utilise the Drinkless package.

Similar questionnaires were administered three and six months after commencement.

The following outcomes were measured in the study:

- **Implementation rate:** The number of general practitioners who screened at least one patient using the programme as a proportion of those general practitioners who agreed to utilise it.
- **Screening rate:** The number of eligible patients who received a screening questionnaire divided by the total number of eligible patients who consulted the general practitioner during the study.
- **Advice-giving rate:** The number of "at risk" patients who were advised by the general practitioner divided by the total number of 'at risk' patients.
- **Overall intervention rate:** A product of screening and advising rates. The maximum rate could be achieved if a general practitioner screened all eligible clients and advised all 'at risk' patients.

Data analysis was conducted using SPSS v9.0. Differences between groups were analysed using chi-square tests for nominal data. Because the distributions of scale data were not considered sufficiently normal to allow the use of parametric tests, Mann-Whitney and Kruskal-Wallis tests were used with scale data and correlations were tested using Spearman's rank correlation coefficients.

## Results

Sixty-eight general practitioners (70.8%) implemented the Drinkless programme. General practitioner drop out rates were equivalent between the two study groups.

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In general patients believe they should receive preventive lifestyle advice from their general practitioner

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Fifteen thousand, one hundred and three patients were recorded as being screened, of whom 2 380 (15.8%) were identified as being 'at risk'.<sup>11</sup> One thousand, three hundred and seventy 'at risk' drinkers (58.0%) were given alcohol-related advice, and 876 (36.8%) were given a patient booklet. There were no significant differences in implementation rates between general practitioners according to either level of support or the original marketing received (mail, telephone, or personal). The number of patients screened and the total number identified as 'at risk' was positively correlated (Spearman's  $r = 0.96$ ,  $p < 0.001$ ). There was also a positive correlation between the total number of 'at risk' patients advised and the total number given a patient booklet (Spearman's  $r = 0.94$ ,  $p < 0.001$ ).

At six months, 22 general practitioners (22.9%) were still using the patient booklet with a significant proportion (defined as greater than 5%) of their patients identified as 'at risk'.

The mean percentage of 'at risk' clients receiving the patient booklet from this group of general practitioners was

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General practitioners have considerable potential to prevent alcohol problems in the community

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61.8% (sd. 36.0) and the median was 77.5% (interquartile range 20–95%). Nine general practitioners (9.4%) were continuing to use the AUDIT screening tool and 15 continued to use the flipcard (15.6%). Twenty-six general practitioners (27.1%) said that they would either 'probably' or 'definitely' continue to use the materials on an ongoing basis.

The mean number of clients screened per general practitioner (including all general practitioners who agreed to utilise the package) in the first 12 weeks of the study was 157.3 (sd. 173). The median number was 100 (interquartile range 0–241.5). No statistically significant differences were found between different support or marketing groups. For screening rates, the mean rate was 27.9% (sd. 30.1) and

the median rate was 17.2% (interquartile range 0–51.1%). Once again, no statistically significant differences were found between different support or marketing groups. The mean rate of advice-giving to 'at risk' patients was 39.5% (sd. 36.3) and the median rate was 39.4% (interquartile range 0–74.7%). Neither telephone support nor marketing received had a statistically significant impact on the rate of advice-giving.

The mean rate at which patient booklets were supplied to 'at risk' patients was 26.7% (sd. 29.2) and the median rate was 16.2% (interquartile range 0–49.5%). Although telephone support had no impact on the rate of patient booklet-giving, type of marketing received did have an apparent influence. The 'personal contact' group produced the highest rate with a mean of 37.1% (sd. 28.6) and a median of 41.7% (interquartile range 0–56.3%) (Kruskal-Wallis  $H = 8.16$ ,  $df = 2$ ,  $p = 0.017$ ).

The mean overall intervention rate was 15.2% (sd. 18.2) and the median was 5.6% (interquartile range 0–27.9%). Telephone support had no effect but again, marketing received was possibly relevant. The 'personal contact' group produced the highest mean overall intervention rate of 23.1% (sd. 20.4) and a median rate of 24.4% (interquartile range 1.5–36.7%) (Kruskal-Wallis  $H = 9.61$ ,  $df = 2$ ,  $p = 0.008$ ).

### Discussion

General practitioners have considerable potential to prevent alcohol problems in the community. Sixty-eight general practitioners were able to screen 15 103 patients during the first 12 weeks of the study and 15.8% of patients were identified as being 'at risk'.<sup>11</sup> The implementation rate in the New Zealand study of 67.7% was noticeably higher than the rate of 57.0% achieved in the English study.<sup>14</sup>

The proportion of screened patients identified as being 'at risk' by Kaner in the English study was 32.1%, and by Gomel<sup>15</sup> in the Australian study was 24.5%. These figures are both higher than in our study. In part this was because the English and Australian studies used lower cutoff scores than the New Zealand study. When the English and Australian cutoffs of six or more for women and seven or more for men<sup>16</sup> were used with the New Zealand AUDIT dataset it increased the proportion of screened at risk patients to 22.4%, which is similar to the Australian proportion but still below England.

New Zealand general practitioners screened more patients than their counterparts in the English study. The median number of patients screened by New Zealand general practitioners was 100 whereas the England median was 38. The English study only reported comparable amounts of screening in the maximal support group, 'training and fortnightly telephone contact' (median 99). The median screening rate in New Zealand was 17%. The medians in the English study were 0%, 2%, and 10% for the 'control', 'training', and 'training and fortnightly telephone contact support' groups respectively. The Australian screening rates were closer to those in the New Zealand study, with median rates of 0%, 14%, 22%, and 26% respectively for the 'control', 'no support', 'fortnightly telephone contact support', and 'site visit support' groups.

The overall intervention rate, which is a factor of both screening rate and advice-giving rate, was higher in the New Zealand study than in the English study with a median rate of 6%. The medians in the English study were 0%, 0%, and 3% for the 'control', 'training', and 'training and fortnightly telephone contact support' groups respectively. New Zealand general practitioners in the 'personal contact' marketing group produced a median overall intervention rate of 24%. The Australian data was not reported in a comparable form.

Looking at advice-giving and patient booklet-giving rates English general practitioners generally achieved slightly higher rates. These ranged from 41% to 59% for advice-giving and from 17% to 22% for patient booklet-giving. The peak rate for patient booklet-giving achieved by New Zealand general practitioners was for those in the 'personal contact' marketing group with a median rate of 42%. The New Zealand rates were higher than the Australian rates, where the median rates for delivering either advice or patient booklets were 0%, 7%, 10%, and 18% respectively for the 'control', 'no support', 'fortnightly telephone contact support', and 'site visit support' groups.

Unlike the English or Australian studies, our data did not produce any evidence that special training or support increased utilisation of any element of screening and brief intervention. There was support, however, for the role of personal contact in increasing the overall intervention rate and the rate of booklet giving.

Only 68 of the original 369 general practitioners approached implemented the screening and brief alcohol intervention package. At 18.4%, this represents a higher proportion than that achieved in the English study

(10.0%) but is still below what might be considered ideal. There was also considerable variation in screening and intervention activity between different general practitioners with some practitioners reporting quite low levels. At six months only 26 general practitioners (27% of the 96 who agreed to utilise and 7% of the original sample) indicated a probable or better intention to continue utilising the Drinkless materials on an ongoing basis, and the reported rates of actual ongoing utilisation were even lower.

As was suggested by Kaner et al,<sup>14</sup> there may still be significant structural and organisational barriers to more widespread and robust utilisation. The most likely barriers identified in our earlier studies,<sup>9,10</sup> but still not addressed in New Zealand, are inadequate funding and government support for screening and brief alcohol intervention in general practice. At the same time, the potential of general practice to screen a section of the population has been demonstrated in this study.

The difference between our results and those of England and Australia raises several possibilities. We note that with or without telephone support our general practitioners achieved similar or better screening rates than those

achieved with telephone support in Australia and England. Are our general practitioners more conscientious to begin with? Or then again are they so busy that a telephone call is an irritant in their day rather than support? Or was the number of general practitioners surveyed in our study too small leading to a statistical error?

Despite this last suggestion however, if an effect of ongoing telephone support exists, this study suggests it may not be positive enough to justify major expenditure on ongoing telephone support when attempting to implement new initiatives in the real world of New Zealand general practice.

Further work is needed to clarify what factors, if any, would enable follow up telephone support to ensure longevity of general practitioner screening and brief alcohol intervention once the key underlying barriers are addressed.

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