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# Evaluation of an alcohol intervention training program for nurses in rural Australia

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## Abstract

**Aim:** This paper reports on the development, implementation and evaluation of the Alcohol Intervention Training Program (AITP) designed to enhance nurses' capacity to work with farming men and women who misuse alcohol.

**Background:** In rural and regional areas where alcohol-related behaviours and problems are relatively elevated, nurses may be the key health professionals dealing with individuals who misuse alcohol. However, they are often ill-equipped to do this, have low confidence in their ability to do so, and perceive numerous barriers. Training is required for these nurses.

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**Methods:** We developed the AITP to enhance nurses' capacity to work with people with alcohol-related problems. The data were collected during 2010. An intervention group of 15 rural nurses completed the AITP. Nurses' perceived barriers, attitudes, and perceived performance in working with clients with alcohol problems, and the frequency of engaging with this client group were evaluated. Scores on these measures were compared to those of a control group of 17 nurses' pre-treatment, post-treatment and at 3-month follow-up.

**Results:** Participation in the AITP resulted in initial improvements in attitudes to working with alcohol problems, but no change in perceived barriers to doing so. The level of engagement with clients having alcohol-related problems increased, as did perceptions of work performance.

**Conclusion:** The AITP enhances the ability of rural nurses to address the alcohol and associated health issues of clients in rural and regional areas. However, the program needs refinement and further evaluation.

### **Keywords**

Depression, evaluation research, nurse education, research implementation, rural nursing, substance abuse

### **Introduction**

Many nurses in a range of health-related work contexts are likely to encounter clients who have alcohol misuse and associated problems. While these problems may not be the immediate concern of nurses because other health professionals are available to address them in some situations, the nurse may need to play a generic health services role. This is particularly likely to be the case in rural and remote areas, where other health and specialised services are 'thin on the ground' (Rajkumar and Hoolahan, 2004).

Rural and regional Australia is one such location, and Humphrey (1998) describes Australian rural environments as characterised by: 'distance, uncontrolled environments, specific occupational hazards, sparse infrastructure, and risk-taking attitudes to health, illness and behaviour'. In such locations, the need for health services for people with alcohol and alcohol-related problems is high, because although alcohol is a significant part of the Australian culture (Teesson et al., 2000), Australians living in rural communities have higher levels of problematic alcohol use compared to their urban counterparts, and experience elevated health risks associated with excessive alcohol consumption (Australian Institute of Health and Welfare, 2008; Fraser et al., 2002). Recent research (Brumby, Willder et al., 2009; Brumby, Wilson et al., 2008) has demonstrated that 54% of men and 22% of women in the cropping and grazing agricultural industries consume alcohol at high or hazardous risk levels at least monthly, according to the National Health and Medical Research Council (NHMRC) 2001 guidelines (NHMRC, 2001).

The physical health consequences associated with alcohol misuse include increased risk of coronary heart disease, many forms of cancer, liver cirrhosis and digestive disorders (Rehm et al., 2003). Psychiatric disorders such as depression and anxiety have also been demonstrated to affect farm men and women in Australia (Kelly et al., 2010; Stain et al., 2008). Fraser et al. (2002) suggest that many of the behaviours, which are commonly associated with poor mental health and psychological well-being, such as interpersonal violence and suicide, are indeed more frequent in rural communities.

In response to these elevated rural and regional health concerns, and to the lack of local health services, the Western District Health Service (WDHS) in Hamilton, Victoria, initiated the Sustainable Farm Families (SFF) program in 2004. This health screening and education program is delivered by trained rural nurses to groups of farm men and women in rural/regional locations. While the SFF programs have seen significant improvements in the detection and management of a number of health and safety areas such as cardiovascular disease, diabetes, cancer and ultraviolet protection, the SFF nurses have reported that they have difficulties in dealing with problematic alcohol-related behaviours and associated problems (Brumby et al., 2008).

This is not unsurprising because, typically, nurses receive little education in the area of alcohol misuse and this training occurs almost invariably during their university degree or hospital training, and the content often has little relevance to the real world (Tsai et al., 2010). Apart from a lack of appropriate or relevant training, nurses often do not actively broach the subject of alcohol misuse with their clients, because they fear highly emotive and negative reactions when the topic of alcohol misuse and drinking behaviour is raised (Lock et al., 2002). Indeed, participants in Lock et al.'s study reported that clients shut down at the first mention of alcohol consumption, regardless of whether or not the conversation was going to be cautionary. In addition, many of the nurses reported confusion about issues such as standard drinks, possible beneficial effects of alcohol, and the recommended sensible drinking limits. A final issue raised by Lock et al.'s participants was their own attitudes towards alcohol. A number of nurses pointed out, that in many cases; they felt hypocritical lecturing their clients about safe levels of drinking when they themselves did not always operate within the recommended levels of alcohol consumption.

In response to these issues of a lack of easily accessible alternative health services in rural areas in Australia, and the low knowledge, efficacy and negative attitudes of nurses working with alcohol misuse and its related problems, we developed an alcohol intervention training program for the nurses who deliver the SFF program. This is additionally important since these rural nurses primarily provide other front line health screening and education services for farm men and women living in rural and remote locations. The Alcohol Intervention Training Program (AITP) consists of four modules delivered over two days which aim to develop nurses' knowledge related to alcohol use and misuse, to enhance their confidence and skills in working with clients who have alcohol-related problems, to reduce perceived barriers to working with this population, and to enhance their attitudes to this kind of work. A pilot study of the AITP was implemented with two groups of three experienced SFF nurses. These nurses, who had extensive experience with the SFF program but were no longer active facilitators, provided extensive verbal and written feedback both during and after the training, which was used to inform the refinement of the AITP. The final modules are as follows:

Module 1 (Understanding Alcohol Use) provides participants with understanding of DSM-IV definitions of relevant mental health conditions, farming and stress, Australian National Health and Medical Council guidelines for safe drinking, standard drinks, physiological effects of alcohol, psychological impacts of alcohol, domestic and family violence, farm accidents and financial costs of alcohol.

Module 2 (Detecting and assessing alcohol use problems and mental health) provides training in the use and interpretation of 4 measures: The Alcohol Use Disorders Identification Test (AUDIT), the Short Index of Problems (SIP), the Depression, Anxiety and Stress Scale 21

(DASS21), and the Readiness to Change Questionnaire (RCTQ). All of the measures can be self-administered by participants in the SFF program, or as part of a structured interview with the nurses.

Module 3 (Communication skills) provides information on dual relationships in rural settings (e.g. health professional in one context, and neighbour/social acquaintance in another) and includes scenario/role plays involving active listening, probing questions and motivational interviewing.

Module 4 (Brief Interventions) provides information on blood alcohol concentration (BAC), empathy, personal responsibility for change, supporting self-efficacy, and tips for reducing drinking. Scenario-based learning of the Timeline Follow Back (TLFB) and AUDIT brief interventions are also included.

Training support materials, developed or sourced for nurses are provided to participants in the form of an information pack. The pack includes a set of worksheets containing group exercises, case scenarios and screening tools/testing measures; a 130 slide power point presentation; a feedback form requiring input at the completion of each session; and a post-training information kit. This kit contains the National Centre for Farmer Health (NCFH) website address and resources pamphlet; standard drink cards and cup; an internet based information resources pamphlet; a referral resources pamphlet; a 'Tips for Reducing Drinking' pamphlet; and background information and administration guidelines for screening tools/testing measures.

## **The study**

### *Aim*

The present study was designed to implement and evaluate the AITP. We hypothesised that relative to a control group which would show no change over the training period and a 3-month follow-up, SFF nurses who participate in the AITP would perceive fewer barriers to working with people with alcohol-related problems, and demonstrate a more positive attitude to working with clients who have alcohol and related problems. Further, we expected that by follow-up, the intervention group nurses would demonstrate increased: (a) perceptions of how well they do their job in relation to alcohol-related problems; and (b) frequency in engaging with clients' alcohol-related problems.

### *Design*

An experimental design was used and the data were collected during 2010.

### *Participants*

Thirty-two SFF nurses who were scheduled to participate in upcoming SFF programs across rural regions of the Australian states of Victoria and Queensland were invited to participate in the study. All were registered division one nurses with rural experience, and all agreed to participate. Once recruited they were randomly allocated to either the intervention group ( $n=15$ ) or the control group ( $n=17$ ), with the caveat that any nurses participating from within the same health service were allocated to the same group (either control or intervention) to reduce cross-contamination.

## Data collection

### Outcome measures

Four self-rated measures were used to assess the outcomes of the training program.

*Perceived barriers to working with alcohol problems scale* assesses perceived barriers to working with alcohol-related problems and was adapted from a scale developed by McCabe et al. (2008) for assessing perceived barriers for nurses and care staff working with the depressed elderly. It consists of 12 items (e.g. I haven't received enough training in alcohol-related problems to know if someone might be alcoholic) which were rated by participants according to their level of agreement using a four-point Likert scale (1 = strongly disagree to 4 = strongly agree). Possible total scores range from 12–48, with a higher score representing perceptions of more barriers to working with people with alcohol-related problems.

*Short Alcohol and Alcohol Problems Perception Questionnaire (SAAPPQ)* is a short form of the Alcohol Problems Perception Questionnaire (AAPPQ) developed by Cartwright et al. (1975) to assess health professionals' attitudes to working with clients with alcohol-related problems. It is a 10-item questionnaire that assesses motivation or willingness to work with drinkers ('motivation'); expectations of work satisfaction with these clients ('work satisfaction'); feelings about their adequacy of knowledge and skills in working with these clients ('role adequacy'); the extent to which the worker feels they have the right to work with drinkers ('role legitimacy'); and their self-esteem in this specific task ('task specific self-esteem'). Participants respond to items such as 'I want to work with drinkers' and 'Pessimism is the most realistic attitude to take towards drinkers' (one of three reversed-scored items) using a 7-point Likert-type scale (1 = Strongly agree to 7 = Strongly disagree). Scores can be derived for five two-item subscales that assess the above-listed domains, or two broader domains, role security (role adequacy plus role legitimacy) and therapeutic commitment (motivation, work satisfaction and task-specific self-esteem). Low scores indicate more positive attitudes.

*The Performance with Alcohol Related Problems Scale (PARPS)* was used to assess participants' self-ratings of their performance in working effectively with people who experience alcohol misuse problems. It consists of 7 items such as 'How well do you think you currently perform in initiating communication about substance use'. Participants respond using a 7-point Likert-type scale (1 = Not at all well to 7 = Very well) to indicate their performance. Scores can range from 7 to 49, with higher scores indicating greater self-perceived performance in working effectively with people who experienced alcohol misuse problems.

*The Frequency of Engaging with Clients' Alcohol-Related Problems Scale (FECARPS)* was used to assess participants' self-reports of the frequency with which they engage with their clients' alcohol and alcohol-related problems. It consists of 7 items such as 'How often do you ask your clients questions about substance use'. Participants respond using a 7-point Likert-type scale (1 = Never to 7 = Almost always) to indicate their performance. Scores can range from 7 to 49, with higher scores indicating a high frequency of engaging with clients about their alcohol and alcohol-related problems.

## Procedure

Prior to the commencement of training, all nurses (intervention and control) were provided with a Plain Language Statement and Consent Form and, if they agreed to participate, they then completed each of the self-rated outcome measures (pre-test). The intervention group attended one of three program venues (Cairns, QLD; Melbourne, VIC; or Hamilton, VIC) for a two-day training course. At the conclusion of training (intervention) or at a comparable time period (control), all nurses completed the questionnaires for the second time (post-test). All participants completed the questionnaire set for the third and final time three months post training (follow-up).

*Ethical considerations.* Approval to conduct this study was obtained from the university human research ethics committee.

## Data analysis

SPSS version 19.0 was used for data analysis. Separate Repeated Measures MANOVAs were utilised to examine interactions between time and participant group for perceived barriers and attitudes over three time points (pre-program, post-program and follow-up), and perceived performance and frequency of engagement with clients' alcohol-related problems across two time points (pre-program and follow-up). Paired comparisons were then used to examine interaction effects between time and group.

## Validity and reliability

The Barriers scale was adapted from McCabe et al.'s (2008) measure for assessing perceived barriers for nurses and care staff working with the depressed elderly. The Cronbach's  $\alpha$  for this scale at pre-test ( $N = 32$ ) was 0.82, indicating good internal consistency.

The SAAPPQ, used to assess nurses' attitudes to working with alcohol problems, has a high degree of correlation with the full length AAPPQ, which has good test-retest reliability and Cronbach's  $\alpha$  in the range of 0.7–0.9 (Cartwright, 1980). The validity of the SAAPPQ was demonstrated by Anderson and Clement (1987) by comparing both the short and full length scales with other responses from Cartwright's original study. In this study, we found that the Cronbach's  $\alpha$ 's for the role security and therapeutic commitment domains at pretest were inadequate (0.41 and 0.13, respectively). We examined the scale as a whole and found that six items from across the five basic domains produced an adequate  $\alpha$ , 0.73. We thus used these items as a measure of general attitudes to working with people with alcohol problems.

PARPS was developed by the research team for this study. This was an important domain to assess given that one of the main aims of the AITP was to increase rural nurses' confidence and skills in working with rural clients who have alcohol-related problems. The Cronbach's  $\alpha$  for this scale at pre-test ( $N = 32$ ) was 0.91.

FECARPS was also developed for this study. This was another important domain to assess given that the AITP was designed to assist nurses raise the topic of alcohol misuse with their clients. The Cronbach's  $\alpha$  for this scale at pre-test ( $N = 32$ ) was 0.79.

## Results

### Repeated measures MANOVA

Descriptive data for the intervention and control groups for each outcome measure at each assessment time point are provided in Table 1.

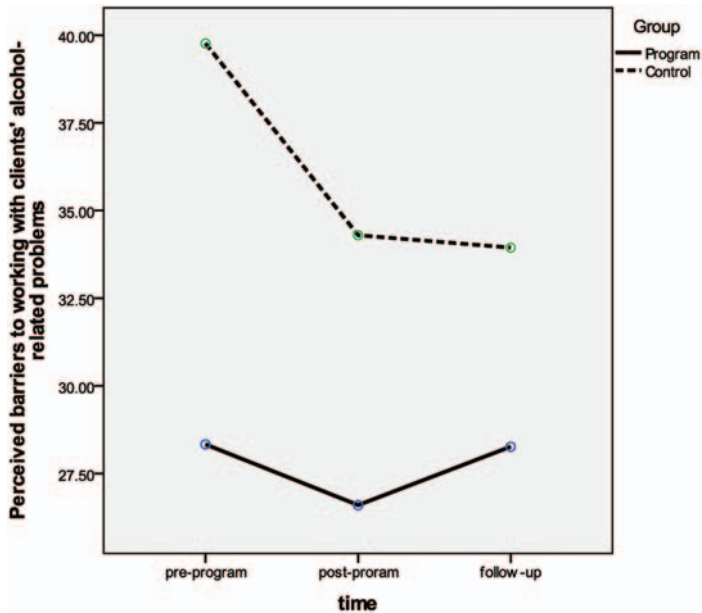
### Perceived barriers and attitudes

A significant multivariate effect for group was found ( $F(2, 29) = 24.88, p < 0.001$ , partial  $\eta^2 = 0.99$ , power = 1.00), and for time ( $F(4, 27) = 24.67, p < 0.001$ , partial  $\eta^2 = 0.79$ , power = 1.00). There was a main effect for group on Attitudes ( $F(1, 30) = 4.78, p < 0.05$ , partial  $\eta^2 = 0.14$ , power = 0.56), and Perceived Barriers ( $F(1, 30) = 44.31, p < 0.001$ , partial  $\eta^2 = 0.60$ , power = 1.00). A main effect for time was also found for Attitudes ( $F(1, 30) = 68.02, p < 0.05$ , partial  $\eta^2 = 0.69$ , power = 1.00), and Perceived Barriers ( $F(1, 30) = 6.10, p < 0.05$ , partial  $\eta^2 = 0.17$ , power = 0.67). A multivariate group (intervention and control) by time (pre intervention, post intervention, and follow-up after intervention) interaction was also found ( $F(4, 27) = 16.05, p < 0.001$ , partial  $\eta^2 = 0.70$ , power = 1.00). Group by time interaction effects were found on both Perceived Barriers ( $F(2, 60) = 4.06, p < 0.05$ ; partial  $\eta^2 = 0.12$ , power = 0.70); and Attitudes ( $F(2, 60) = 17.00, p < 0.001$ , partial  $\eta^2 = 0.36$ , power = 1.00). In order to examine the interaction effects more fully, paired comparisons were made, and reported below.

**Perceived barriers.** A summary of the interaction effect for barriers to working with people who misuse alcohol is provided in Figure 1. The intervention group perceived fewer barriers to working with people who misuse alcohol than the control group at all three assessment points (pre-program:  $p < 0.001$ ; post-program:  $p < 0.001$ ; follow-up:  $p < 0.01$ ), but it did not demonstrate any change in perceived barriers across the assessment phases. On the other hand, and contrary to expectations, the control group reported fewer barriers at the post-training assessment than at baseline ( $p < 0.001$ ). This change was maintained between the post-training and follow-up, with perceived barriers remaining significantly fewer than at

**Table 1.** Means and standard deviations across time and group

	T1	T2	T3
Measure			
1. Barriers			
Intervention	28.33 (5.65)	26.60 (2.35)	28.26 (4.94)
Control	39.76 (3.31)	34.29 (6.41)	33.94 (5.04)
2. SAAPPQ			
Intervention	20.73 (3.13)	18.67 (2.85)	28.60 (3.91)
Control	22.35 (2.15)	23.94 (2.49)	26.76 (3.01)
3. Self-rated performance			
Intervention	30.13 (12.17)		38.00 (5.85)
Control	20.24 (8.76)		28.71 (8.33)
4. Frequency of engaging with client's alcohol issues			
Intervention	18.73 (9.63)		36.13 (6.30)
Control	24.82 (3.88)		28.59 (9.86)



**Figure 1.** Perceived barriers to working with clients' alcohol-related problems at pre-program, post-program and follow-up.

baseline ( $p < 0.05$ ) for this group. The hypothesis relating to perceived barriers was therefore not supported.

### Attitudes

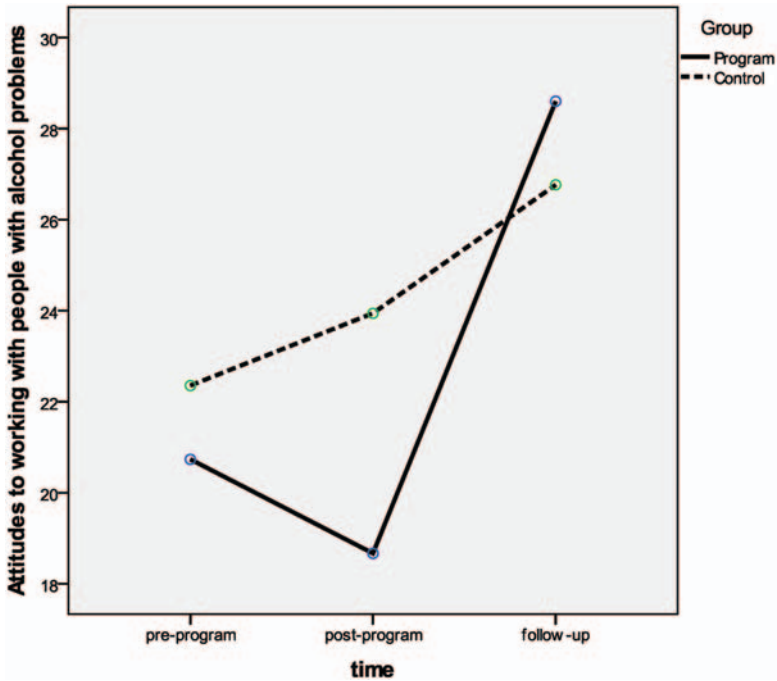
A summary of the interaction effect for the SAAPPQ responses is provided in Figure 2. The groups did not differ at baseline, and both groups demonstrated significant changes in attitudes to working with people who misuse alcohol post-training relative to baseline. However, the intervention group's attitude became significantly more positive ( $p < 0.001$ ), while the control group's became significantly more negative ( $p < 0.01$ ). As a result, there was a significant difference between the groups at post-training ( $p < 0.001$ ).

Between the post training assessment and follow-up, the intervention group's attitudes significantly worsened ( $p < 0.001$ ) to the point that at follow-up they were more negative than at baseline ( $p < 0.001$ ). In addition, the control group's attitudes became even more negative than at post-training ( $p < 0.01$ ). The intervention group and the control group did not differ at follow-up. The hypothesis that participation in the AITP would improve nurses' attitudes to working with people with alcohol-related problems was supported at post-training, but not at follow-up.

### Performance with alcohol-related problems and frequency of engaging with clients' alcohol-related problems

Because the post-test was administered immediately after the training, and there was no opportunity for the participants to change their performance in relation to alcohol-related





**Figure 2.** Attitudes to working with clients' alcohol-related problems at pre-program, post-program and follow-up.

problems at post-training, we conducted analyses only from baseline to follow-up. The initial repeated measures MANOVA indicated a significant multivariate effect for group ( $F(2, 29) = 13.26, p < 0.001, \text{partial } \eta^2 = 0.48, \text{power} = 1.00$ ), and for time ( $F(4, 27) = 15.15, p < 0.001, \text{partial } \eta^2 = 0.69, \text{power} = 1.00$ ). A multivariate group (intervention and control) by time (pre-intervention and follow-up after intervention) interaction was also found ( $F(4, 27) = 8.80, p < .001, \text{partial } \eta^2 = 0.57, \text{power} = 0.99$ ). Group by time interaction effects were found on frequency of engaging with clients' alcohol-related problems ( $F(2, 60) = 8.10, p < 0.01, \text{partial } \eta^2 = 0.21, \text{power} = 0.95$ ) but not for performance with alcohol-related problems. For performance with alcohol-related problems there were main effects for time ( $F(1, 30) = 18.76, p < 0.001, \text{partial } \eta^2 = 0.39, \text{power} = 0.99$ ) and group ( $F(1, 30) = 27.39, p < 0.001, \text{partial } \eta^2 = 0.96, \text{power} = 1.00$ ).

### *Performance with alcohol-related problems*

Scores for performance with alcohol-related problems are shown in Figure 3. The intervention group scores were significantly higher than those of the control group at each of the time points ( $p < 0.05$  at baselines,  $p < 0.01$  at follow-up). Both groups' ratings of their performance with clients with alcohol use problems increased significantly between baseline and follow-up ( $p < 0.01$  in each case). The hypothesis related to self-rated performance therefore was not supported.

The time by group interaction effect for frequency of engagement with clients' alcohol problems is shown in Figure 4. At baseline the control group reported significantly more

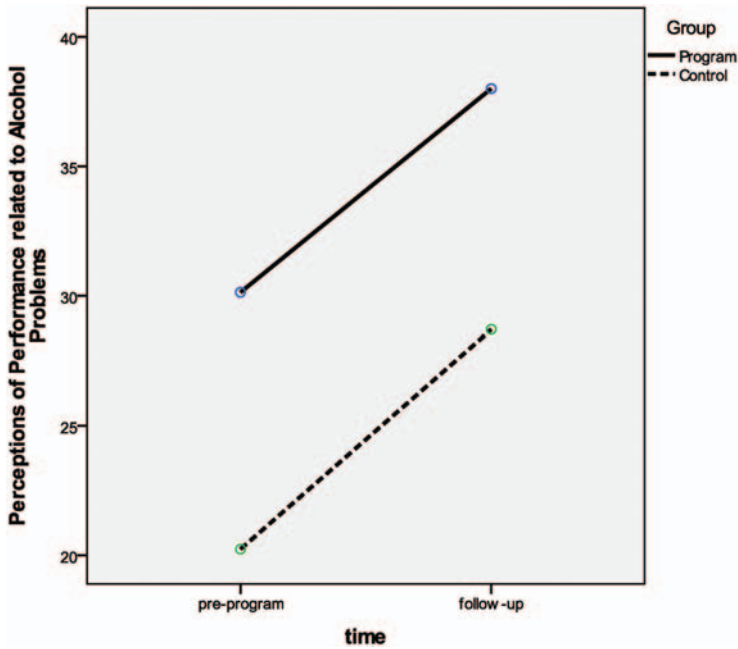


Figure 3. Perceived performance in working with clients' alcohol-related problems at pre-program, post-program and follow-up.

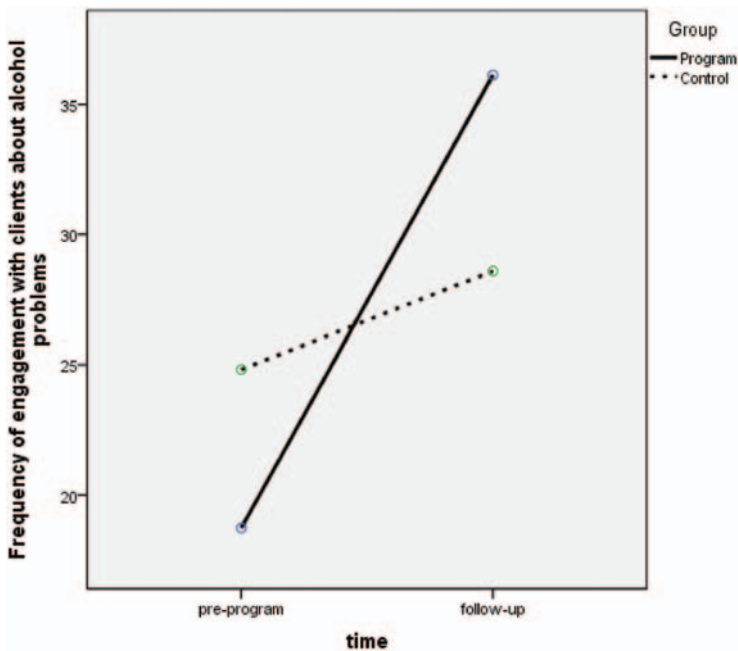


Figure 4. Frequency of engaging with clients' alcohol issues at pre-program, post-program and follow-up.

frequent engagement with clients' alcohol-related problems than the intervention group ( $p < 0.05$ ). The intervention groups' scores increased significantly from the baseline score ( $p < 0.001$ ) such that by follow-up it was significantly higher than that of the control group ( $p < 0.05$ ), whose score did not change. Thus, the hypothesis relating to the frequency of engaging with alcohol-related problems was supported. The intervention groups' scores rose significantly, but the control groups' did not.

## Discussion

### *Study limitations*

Our study provided a preliminary evaluation of the AITP. With only 32 participants, the conclusions that can be drawn are limited, so a larger randomised control study (RCT) is now required. As outlined below, differences between our intervention and control groups on some variables at baseline make it difficult to interpret some results. As well as being a randomised trial, a further larger study needs to consider controlling for previous work history and education in the areas of alcohol misuse and mental health, and other demographic variables. In addition, the main aim of this intervention is to address the alcohol and alcohol-related problems of clients, in this case farm men and women who participate in the SFF. Therefore, in a RCT, the alcohol-related behaviours and problems of the clients of AITP trained nurses and control group nurses need to be assessed at pre-training, and at follow-up to ascertain whether any change in the nurses' knowledge, efficacy, attitudes and perceived barriers has a down-the-line impact on the clients' well-being.

### *Evaluation of the AITP*

Previous research (Tsai et al., 2010) has indicated that nurses working in community settings lack appropriate skills in relation to dealing with clients with alcohol misuse, and its related problems. Combined with negative attitudes and the perception of other barriers to working in this area, nurses may not actively engage to address these issues with their clients. While other agencies or health professionals may be able to take on this work in urban locations, in rural areas where services are lacking and health professionals are frequently limited, lack of action by nurses who are engaged with clients may leave these clients open to risk for further health problems or other negative outcomes.

In response to this issue, we developed the AITP for nurses who facilitate the SFF program, a health screening and education service for farm men and women in rural and regional Australia. The current study aimed to investigate the impact of this program on nurses' perceptions of barriers to working with alcohol and related problems, their evaluations of their own performance in this area of work, their frequency of engaging with clients on the topic of alcohol use and related problems, and their attitudes to working with clients with such problems.

The outcomes of this evaluation were mixed. Our first expectation was that the AITP would reduce the perceived barriers to working with alcohol and alcohol-related problems. Results showed that training had no impact on the intervention group's mean score on this variable, but the control group's reduction in perceived barriers at the post-training assessment was maintained at 3-month follow-up. It is noteworthy that there was a large difference between the groups at pre-training, with the control group's having a significantly higher score and so a greater opportunity to decrease. The inequity between scores at

baseline and throughout the study period limits any interpretation of this finding, other than that the AITP does not appear to have reduced perceived barriers.

The second prediction was that nurses who participated in the training program would have more positive attitudes to working with people with alcohol problems. We found that there was an immediate positive impact for the intervention group in this domain, but unexpectedly, both groups developed a more negative attitude toward working with such clients by the 3-month follow-up. This effect may have been due to a number of reasons. For example, it may be that simply completing the program aroused hope and a more optimistic view about this work for the intervention group members, but at follow-up their enthusiasm had been jaded by the difficulties of working with clients with alcohol problems to the point where their attitudes had become more negative than at baseline. This suggests that nurses in the AITP may have become disillusioned in their work with this client group, and need more support in working with this population in rural areas. Interestingly, the control group also developed more negative attitudes over the three months, thus suggesting that taking part in the study may have increased their awareness about the difficulties of working with clients who misuse alcohol.

Our third and fourth predictions related to expected changes in the self-reported performance and frequency of engagement with clients' alcohol problems, on the basis that we expected reduced perceptions of barriers and more positive attitudes to translate into practice for our intervention group. We investigated change only between pre-program scores and follow-up, because there was no opportunity for nurses' practices to change between pre-program and post-program. With regard to self-ratings of performance with alcohol-related problems, the subject of the third prediction, there was a significant increase for the intervention nurses. However, the control group also showed an improvement from baseline to 3-month follow-up. These findings are difficult to interpret because there was a significant difference in the scores of the groups at both time points, with the intervention group rating their performance higher than the control group.

Our final prediction related to frequency of engagement with clients in relation to alcohol issues. This hypothesis was supported, in that although there was a difference between the groups at baseline, with the intervention group reporting more frequent engagement, over the course of the study the intervention group exhibited a significant increase, while the control group exhibited no change. This finding is encouraging, as it suggests that nurses were more at ease in raising alcohol issues and this is an important first step to improving their capacity to work with farm men and women who misuse alcohol.

Overall, the AITP shows promise as a tool to assist regional and remote nurses to improve their engagement with clients with alcohol and alcohol-related problems. Such a shift would potentially have a considerable impact of the health and well-being of these clients. The AITP produced some positive outcomes in attitudes and practice, whilst at the same time failing to produce other expected outcomes. Modifications to content related to barriers need to be considered, and perhaps booster sessions delivered to remote and regional nurses by electronic media (e.g. video and teleconference) would be helpful, although adequate internet connections would be required and these are not equitably distributed in regional, rural and remote areas. For those nurses who are not so geographically isolated, spreading the delivery of the program over a number of weeks, with the opportunity to practice and revise knowledge and skills may assist in the assimilation of new material into their existing knowledge and skills base. Further, although the AITP was developed and trialled in Australia, it also has potential to be used in other locations (e.g. the United States and Taiwan) where similar alcohol problems, lack of health professionals in rural areas, and

these health professionals' unpreparedness to engage with these problems have been documented (Baca et al., 2008; Clark, 2005; Richardson, 2008; Tsai et al., 2010).

## Conclusion

The AITP has the potential to enhance the capacity of nurses to work with people who misuse alcohol. It may be particularly useful for nurses working in regional, rural and remote locations where there are limited health and specialist services. Further refinement and development of the program is required, and the impact of the program on the end-user, the client, needs to be evaluated.

### Key points

- Alcohol misuse and related problems are relatively high in farming communities.
- Nurses who work with farming men and women have the opportunity to respond to these issues.
- An Alcohol Intervention Training Program (AITP) demonstrated some potential to increase nurses' capacity to do this.

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## Conflict of interest statement

None declared.

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**Marita McCabe** is a Professor of Psychology at Deakin University. Her areas of research expertise are in health and clinical psychology. In particular, she has conducted research on body image, particularly among males, as well as the mental health of older people. Her research is very applied, attempting to seek solutions for a range of problems that impact on mental health. The current study builds on this focus on mental health and it is hoped that this research will lead to better services for the mental health and alcohol problems experienced by farm men and women.

**Lina A Ricciardelli** is an Associate Professor in the School of Psychology at Deakin University, and the Chair of the College of Health Psychologists in the Australian Psychological Society. Lina has published over 100 papers in the fields of health psychology, developmental psychology, and substance use. A large focus of her research has been on the role that sociocultural factors play in the development of body image and alcohol problems, and other health risk behaviours among children, adolescents, and adults. These have included gender-role stereotypes, sport, the media, peers, social comparisons, acculturation, and the family.

**Susan Brumby** is the founding director of the National Centre for Farmer Health, an innovative partnership between the Western District Health Service and Deakin University, Australia where she is a Clinical Associate Professor. She leads the implementation of five key strategies to improve the health, wellbeing and safety of farm men and women which includes inventive service delivery models, farmer research, nurse run Agriclincs and novel education. She is Chair for the Graduate Certificate in Agricultural Health and Medicine at Deakin University, and her research interests are farmer health, rural health literacy and increasing workforce capacity for health and agricultural professionals.

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