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Enhancing the knowledge and skills of advisory and extension agents in mental health issues of farmers

Objectives: To increase knowledge and skills of Advisory and Extension Agents (AEAs) in recognising the symptoms of mental disorders, providing initial help, and offering the referral pathway for appropriate professional help.

Method: Provide Mental Health First Aid (MHFA) training to AEAs and compare assess knowledge and skills pre-training to six month post training.

Results: The MHFA training improved the AEAs' ability to recognise a mental disorder, increased their confidence level in providing help to someone with a mental health problem, decreased social distances and positively changed their beliefs about treatment.

Conclusion: MHFA training is effective in enhancing the mental health knowledge and skills of AEAs. The agents, who are a main line of contact of farmers, are able to recognise mental disorders of people and help them appropriately. They are more willing to work with stigmatized people and know who to refer people to for help.

Keywords: mental illness, training, knowledge, skills, confidence.

Background

Historically, the farming industry has paid little attention to the health of its families,[1] even though good health is a critical factor in the viability of the industry's human resource, the basis of its productivity, and the future of rural communities.[2]

The Australian Institute of Health and Welfare provides evidence to show that *the general health of rural people is … very poor* and worse than that of urban communities.[3] [4] Rural populations have above average rates of premature mortality through heart disease, cancer and suicide. Cancer, heart disease, stress and suicide rates are higher in the farming population[2,5] and account for the increased mortality. For example male farmers face a 40 per cent increase in age standardised deaths compared with the general male population.[1] Suicide rates across most age groups for men are higher in rural and remote centres and for women in the 30 to 44 year age group.[6] Suicide is usually associated with mental illness, which, in farming communities, appears to be particularly stigmatized and poorly understood.[7]

The vulnerability of farmers to stress has been documented[8] and authors of a recent review concluded that the farming environment has unique characteristics that are potentially hazardous to mental health.[5] Contributory factors to stress include production demands, financial uncertainty, weather patterns, long work hours, inter-generational relationships and an ageing population.[9] Many of these factors have been aggravated in recent years by changes in farming practice, by economic factors and by the long-term drought. These factors contribute to the rate of suicide in farmers and farm workers being the highest in any occupational group.[10]

Effective measures to address diagnosis, treatment and support of this vulnerable group are needed. However previous research into mental health issues in rural Australian communities

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has shown that there is a lack of understanding regarding mental health issues and reduced accessibility to mental health services.[11] Partially as a consequence of these issues famers with mental health problems often are reluctant or unable to access formal health services.

An initiative was designed to deliver need-based mental health training to AEAs who are involved in working with rural farming communities. The AEAs (named variously as Field Officer, Extension Officer, Catchment Officer, Landcare Officer, Financial Counsellor, Agribusiness Officer, Agricultural System Officer) are often the first port of call for emotional support and referral for farmers even though they are limited in terms of qualifications, skills and role.[11,12]

The intervention involved training for AEAs working in Southern Queensland using the Mental Health First Aid (MHFA) Kit[13]. The training enabled them to recognise behaviour that would suggest concern for the mental wellbeing of their clients. As a result of this training the AEA would be able to: a) advise the farmers on the location of resources such as education materials or health professionals; b) build resilience in farmers and to recognise, deal with and access support when needed; and c) develop local networks of information and referral pathways.

Methodology

Thirty two AEAs from the Department of Primary Industries & Fisheries (13), the Department of Natural Resources & Water (5), the Queensland Murray Darling Committee (12) and the Condamine Alliance (2) participated in the MHFA training. Prior meetings revealed interest in the program by the organisations, who then encouraged self-nomination from their staff. Once identified, the participants were divided into two groups. The initial intention was to balance groups for employer, age, sex and work experience, however owing to ongoing job commitments some participants self-selected into Group 1 (n=17) or Group 2 (n=15).

The project used the Mental Health First Aid Kit (MHFA) materials.[13] Training was undertaken by accredited MHFA instructors. Before the training of Group 1 in September 2007, a pre-training assessment was completed. The same questionnaire was offered at a six month follow-up assessment conducted in March 2008. The 15 AEAs in Group 2 were trained in March 2008 and followed up was August 2008 with the same questionnaires as for Group 1. The questionnaires were mailed to participants who responded anonymously.

Testing of knowledge, skills and experience of the 32 AEAs at pre-training and six month follow-up was undertaken using MHFA assessment material that covers the areas: a) confidence in helping someone with a mental health problem; b) knowledge on the ability to recognise mental health symptoms; c) social distance; d) belief in treatment-referral pathways); and e) stigmatized attitudes.

Data were analysed using SPSS 15.0 for Windows. Frequency counts and percentages, as well as means and standard deviations, were calculated for the descriptive data. T-tests were used to compare knowledge and skills between pre-training and follow-up within and between Groups. The resulting differences in knowledge and skills were tested for significance at .05 level of probability with an accompanying 95% confidence level.

Ethics approval for the study was given by the Human Research and Ethics committee of the University of Southern Queensland.

Results

Personal profile
A summary of the profiles of the two Groups is presented in Table 1. Group 1 were significantly younger (21 to 60 years, average 35.2 years), than Group 2 (27 to 58 years, average 42.4 years). Group 1 also had more males and fewer years of work experience. Twice as many Group 1 participants responded "yes" to the question "have you yourself ever experienced a mental health problem yourself or in someone else in your family?" than did those in Group 2.

Confidence
The confidence of respondents in helping someone with a Mental Health Problem was calculated based on a scale of *not at all* (1), *a little bit* (2), *moderately* (3), *quite a bit* (4) and *extremely confident* (5). Results shown in Table 2 indicate that the MHFA training significantly improved AEAs confidence in both groups. There were no differences between groups in their confidence either pre-training or at six months.

Knowledge
The questionnaire contained fifteen mental health related questions with one point for each correct answer. Results presented in Table 2 indicate that the MHFA training increased the degree of mental health knowledge among the participants and thus the ability to recognise the symptoms of mental disorders. There were no differences between the groups.

Social distance
The participants were asked five questions to indicate their degree of willingness to associate with a person with schizophrenia. Options were *definitely willing* (1), *probably willing* (2), *probably unwilling* (3) and *definitely unwilling* (4). Results show that only Group 1 changed in their responses following the training.

Belief in treatment
Twelve sources of help, eight medication and thirteen action related questions on mental depression were asked to AEAs. Response options were *helpful* (1), *neither* (2) and *harmful* (3). Only Group 1 showed a significant change in belief after training.

Stigmatized attitudes
The AEAs were asked to respond to nine statements related to stigmatized personal attitudes. Options were *strongly agree* (1), *agree* (2), *neither agree nor disagree* (3), *disagree* (4) and *strongly disagree* (5). Groups differed significantly in attitudes (t =-8.402, (=.001) at pre-training. Attitudes improved after training in both groups, but only significantly so in the Group1.

Similarly the AEAs were asked to respond to ten statements related to stigmatized perceived attitudes on a similar five point scale. There was no difference as a result of training. However significant differences were found between groups at both time intervals.

Effect of age, sex and work experience
Comparison by age (40 years and below and over 40 years) showed no differences (all (> .08) in any parameters. Similarly there were no differences (all (> .10) according to sex or work experience (5 year or less or more than 5 years; all (> .20).

Effect of prior experience to mental health
The participants who had prior experience in mental health problem differed significantly at pre training in knowledge (t=2.92, (=.007) and personal attitudes (t=-2.38, (=.02) than those who indicated that they had no prior experience. Post-training there were no significant effects.

Discussion
The results are consistent with previous studies[13-18] and show that the MHFA training is effective in enhancing mental health knowledge and skills of course participants; in this case AEAs. The training also enhanced the participants' knowledge on various issues and ability to recognise various symptoms of mental disorders. This exposure might help them to change their personal attitudes and deal with mentally ill clients more effectively.

Following training AEAs are more competent to provide help to someone with mental health problems and are able to recognise mental disorders of people. Their personal attitudes toward stigmatized people have been changed. They are more willing to work with a stigmatize person and know who to refer to for help.

Age, sex and work experience did not have any effect. Participants who had experience in mental health problems showed a higher level of knowledge in pre-training about mental health issues. The long standing drought in Queensland and the current economic climate has received a lot of attention in the media and the division of participants allowed comparison at pre-training that might have been influenced by that media coverage. We suggest that this was not the case as the difference that did occur can be explained by prior experiences.

In our social milieu there are strong stigmatized beliefs about mentally ill people and this belief strongly affects peoples' attitudes and feelings. Those participants with prior experience of mental health had a more positive attitude towards people with mental health issues pre-training. This difference was removed post-training.

Social distance results are equivocal. Only one of the groups showed a significant change in attitude, albeit a positive one. The reasons for this difference are unknown, but perhaps some chance comment by a member of the group had an impact on the others.

Conclusions

The MHFA training is effective in enhancing mental health knowledge and skills of AEAs. The agents who are a main line of contact of farmers are now able to recognise mental disorders of people and help them appropriately. They are more willing to work with stigmatized people and know who to refer to for help.

However, this study has limitations in its ability to identify the use and impact of training. It is recommended further studies be carried out to evaluate the impact of training on the mental health and wellbeing of the farming community.

Acknowledgement

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Table 1. Distribution of AEAs based on their personal profile

Personal profile	Category	Group1 (n=17) Frequency	Group2 (n=15) Percent
Confidence			
Group 1	2.53	3.18	t= -2.34, (=.025
Group 2	2.40	3.22	t= -3.02, (=.006
Comparisons	t=.503, (=.61	t=-.145, (=.88	
Combined G1&G2	2.47	3.19	t=-3.74, (=.001
Knowledge			
Group 1	5.94	10.06	t=--4.47, (=.001
Group 2	6.13	10.33	t= -3.89 (=.001
Comparisons	t=-.174, (=.86	t=-.358, (=.72	
Combined G1&G2	6.03	10.15	t= -6.04 (=.001
Social distance			
Group 1	1.88	1.49	t=-2.187, (=.036
Group 2	1.94	2.33	t=-1.55, (= .13
Comparisons	t=-.302, (=.765	t= -3.77 (=.001	
Combined G1&G2	1.91	1.78	t=0.78, (= .44
Belief in treatment			
Group 1	1.69	1.55	t=-2.08, (=.045
Group 2	1.66	1.66	t=-.027, (= .97
Comparisons	t=.328, (=.74	t=-1.642, (=.11	
Combined G1&G2	1.64	1.56	t = 1.51, (= .13
Personal attitude			
Group 1	2.81	4.24	t=-8.87, (=.001
Group 2	3.95	4.59	t=-1.70, (=.10
Comparisons	t=-8.402, (=001	t=-.952, (=.35	
Combined G1&G2	3.32	4.36	t = -4.95, (= .001
Perceived attitude			
Group 1	2.61	2.51	t=1.658, (=.11
Group 2	3.15	3.05	t=-.348, (=.73
Comparisons	t=-3.32, (=.002	t=-2.177, (=.04	
Combined G1&G2	2.89	2.68	t=1.43, (= .15

Significant values are (?.05