

# Diabetes and Depression: an evaluation of workshops for health professionals 2004

Prasuna Reddy, University of Melbourne; Angela Komiti, Monash University; Michael Kyrios, University of Melbourne; Susanne Baxandall, Diabetes Australia-Vic; Patricia Dunning, St Vincent's Hospital; Virginia Hagger, International Diabetes Institute.

## Background

- 1 in 5 Australian adults suffer from depression (ABS, 1997).
- People living with diabetes have two-fold increased risk of co-morbid depression compared to individuals without diabetes (Anderson et al., 2001; Egede & Zheng, 2003).
- Depression compromises the effective management and treatment of diabetes and is associated with greater number of diabetes complications (de Groot et al., 2001).
- Depression is a treatable condition; results from controlled trials of treatment of depression co-occurring with diabetes using pharmacologic and psychotherapeutic approaches have been favourable (Lustman et al., 1997; Lustman et al., 1998).
- However, identifying and managing depression co-occurring with chronic illness such as diabetes can be problematic. Contributing factors include: health professionals' lack of knowledge and confidence in recognising and managing the symptoms of depression; negative attitudes towards mental health problems; being unaware of how and whom to refer to for treatment and/or management of depression.

## Aims of the workshop

- Improve health professionals' knowledge and confidence in recognition and management of depression in people living with diabetes.
- Provide health professionals with resources to assess depression and related disorders.
- Enhance health professionals' knowledge of evidence-based treatments for depression.

## Method:

- Workshop advertised to health organisations throughout metropolitan and regional Victoria through flyers and DA-Vic website: www.dav.org.au.
- Workshop topics covered: importance of addressing depression and mental health issues in diabetes; identification and assessment of depression; when and how to refer to mental health services; case studies; management of depression.
- Participants also completed pre- and post-workshop questionnaires where they were asked to rate their level of knowledge and confidence about the recognition and management of depression co-occurring with diabetes.
- Beliefs about the usefulness of various forms of treatment of depression and attitudes towards depression were elicited. Participants were also asked about their current referral and information gathering practices.

## Participants:

A total of 97 health care professionals (89.7% females; mean age 43.2 ) attended the workshops.

Majority were nurses (63.4%). Other health professionals were: Podiatrists, Social workers, Dietitians, Psychologists, Occupational Therapists, other allied health workers. Most worked in hospitals (45.4%) or community health centres (25.3%).

## Results

Over 50% of participants rated themselves as having poor to very poor knowledge of: diagnostic criteria of depression, different methods or tools used to diagnose depression, referral pathways and sources of support available for diabetic patients experiencing depression and, pharmacological and psychological treatments for depression.

- Also over 50% of participants rated their confidence as poor to very poor in the following tasks: using materials or tools to assist in recognising depression, providing patients with relevant information regarding the psychological impact their illness may have on their lives, and developing a plan to ensure their patients would have access to ongoing peer support and services for depression.

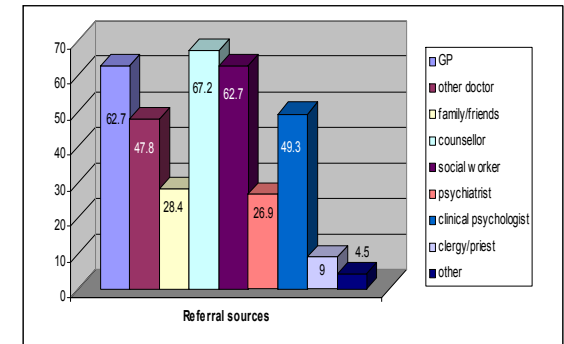


Figure 1. Professionals referred to for management of depression by health professionals working with people living with diabetes.

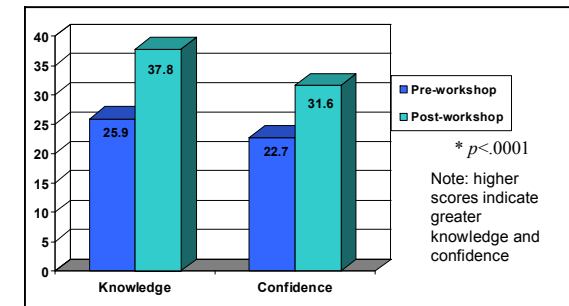


Figure 2. Comparing pre- and post workshop total knowledge and Confidence scores.

T-tests were used to compare pre- and post-workshop total knowledge and confidence scores. The results indicated significant improvement ( $p < .001$ ) in both total knowledge and total confidence scores (see Figure 2).

Paired t-test comparisons were also used to compare the individual items on the knowledge and confidence questionnaires. There were significant improvements on all items for both questionnaires (see Figure 3 below).

### Questionnaire - Confidence in practice items

- 1: Recognise the symptoms of depression
- 2: Distinguish between normal and abnormal psychological responses to a diabetic event
- 3: Use materials or tools that assist you in diagnosing depression
- 4: Initiate discussions and communicate with diabetic patients regarding their psychological needs and concerns
- 5: Discuss any family history of depression with patients
- 6: Provide effective support to a diabetic patient experiencing depression
- 7: Provide the patient with relevant information regarding the psychological impact their illness may have on their lives
- 8: Refer patients to treatments and support networks that cater to their individual needs
- 9: Develop a plan that ensures patients will have access to ongoing peer support and services for depression

### Questionnaire - Knowledge of depression items

- 1: Symptoms of depression
- 2: Symptoms of depression in diabetic patients
- 3: Risk factors associated with depression in diabetic patients
- 4: Prevalence of depression in diabetic patients
- 5: Diagnostic criteria of depression
- 6: The impact of depression on diabetes self-care
- 7: Different methods or tools used to diagnose depression
- 8: The referral pathways and sources of support available for diabetic patients experiencing depression
- 9: Pharmacological treatments for depression
- 10: Psychological treatments for depression

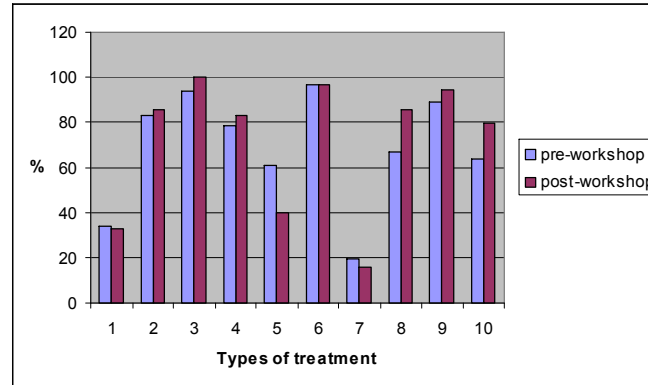


Figure 3. Ratings of usefulness of treatments for depression, comparing pre- and post-workshop.

### Types of treatment for depression items

- Sleeping tablets/sedatives
- Brief psychological therapies
- Antidepressant medication
- Read about people with similar problems and how they have dealt with them
- Natural remedies
- Becoming more physically active
- Having an occasional alcoholic drink to relax, get to sleep or help to cope
- Self-help books
- Long-term counselling
- Change in diet

### Discussion and Conclusion

The aims of the workshop were achieved. Participants' knowledge and confidence regarding the identification and management of depression were significantly improved post-workshop.

Interestingly, participants tended to refer more to counsellors and social workers for depression management, rather than psychiatrists or clinical psychologists. Participants expressed overall satisfaction with the workshop and indicated an interest in further practice-based workshops which teach basic intervention skills.

The challenge remains to determine if such changes in knowledge, confidence and attitudes to the identification and management of depression translate into practice and are sustained on a long-term basis. This could be ascertained through longitudinal follow-up of workshop participants, although this in itself presents certain logistical and costly issues.

### References

1. Anderson RJ, Freedland KE, Clouse RE, Lustman PJ: The prevalence of comorbid depression in adults with diabetes: a meta-analysis. *Diabetes Care* 2001; 24:1069-1078. 2. Australian Bureau of Statistics. The National Survey of Mental Health and Well-being of Adults, 1997. 3. Botega N, Mann A, Blizard R, Wilkinson G. General practitioners and depression – first use of the Depression Attitude Questionnaire. *International Journal of Methods in Psychiatric Research* 1992; 2: 169-180. 4. de Groot M, Anderson RJ, Freedland KE, Clouse RE, Lustman PJ. Association of depression and diabetes complications: a meta-analysis. *Psychosomatic Medicine* 2001; 63:619-630.

5. Egede LE, Zheng D: Independent factors associated with major depressive disorder in a national sample of individuals with diabetes. *Diabetes Care* 2003; 26:104-111. 6. Hickie IB, Davenport TA, Scott EM, et al. Unmet need for recognition of common mental disorders in Australian general practice. *Medical Journal of Australia* 2001; 175 Suppl July 16: S18-S24. 7. Lustman PJ, Griffith LS, Freedland KE, Kissel SS, Clouse RE. Cognitive behavior therapy for depression in type 2 diabetes: a randomised control trial. *Annals of Internal Medicine* 1998; 129: 613-621. 8. Lustman PJ, Griffith LS, Clouse RE, Freedland KE, Eisen SA, Rubin EH, Carney RM, McGill JB. Effects of nortriptyline on depression and glycemic control in diabetes: results of a double-blind, placebo controlled. *Psychosomatic Medicine* 1997;59: 241-250.





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- However, identifying and managing depression co-occurring with chronic illness such as diabetes can be problematic.
- Contributing factors include: health professionals' lack of knowledge and confidence in recognising and managing the symptoms of depression; negative attitudes towards mental health problems; being unaware of how and whom to refer to for treatment and/or management of depression

## Aims of the workshop:

- Improve health professionals' knowledge and confidence in recognition and management of depression in people living with diabetes.
- Provide health professionals with resources to assess depression and related disorders.
- Enhance health professionals' knowledge of evidence-based treatments for depression.

## Method:

- Workshop advertised to health organisations throughout metropolitan and regional Victoria through flyers and DAV website.
- Workshop topics covered: importance of addressing depression and mental health issues in diabetes; identification and assessment of depression; when and how to refer to mental health services; case studies; management of depression.
- Participants also completed pre- and post-workshop questionnaires where they were asked to rate their level of knowledge and confidence about the recognition and management of depression co-occurring with diabetes.
- Beliefs about the usefulness of various forms of treatment of depression and attitudes towards depression were elicited. Participants were also asked about their current referral and information gathering practices.

## Participants:

A total of 97 health care professionals (89.7% females; mean age 43.2 ± 9.9 yrs) attended the workshops.

Majority were nurses (63.4%). Other health professionals were: Podiatrists, Social workers, Dietitians, Psychologists, Occupational Therapists, other allied health workers. Most worked in hospitals (45.4%) or community health centres (25.3%).

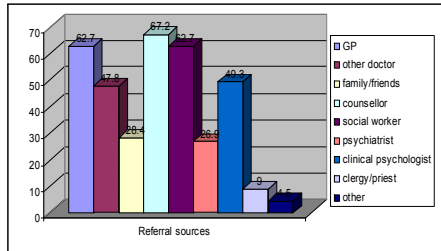


Figure 1. Professionals referred to for management of depression by health professionals working with people living with diabetes.

## Results

Over 50% of participants rated themselves as having poor to very poor knowledge of: diagnostic criteria of depression, different methods or tools used to diagnose depression, referral pathways and sources of support available for diabetic patients experiencing depression and, pharmacological and psychological treatments for depression.

- Also over 50% of participants rated their confidence as poor to very poor in the following tasks: using materials or tools to assist in recognising depression, providing patients with relevant information regarding the psychological impact their illness may have on their lives, and developing a plan to ensure their patients would have access to ongoing peer support and services for depression.

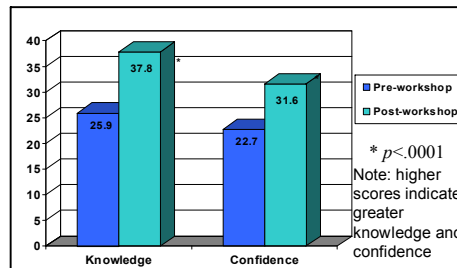


Figure 2. Comparing pre- and post-workshop total knowledge and Confidence scores.

T-tests were used to compare pre- and post-workshop total knowledge and confidence scores. The results indicated significant improvement ( $p < .001$ ) in both total knowledge and total confidence scores (see Figure 2 below).

Paired t-test comparisons were also used to compare the individual items on the knowledge and confidence questionnaires. There were significant improvements on all items for both questionnaires (see Figures 3 & 4 below). See Tables 1 and 2 for the individual items for the knowledge and confidence questionnaires.

## Figure 2. Knowledge of depression items

- Symptoms of depression
- Symptoms of depression in diabetic patients
- Risk factors associated with depression in diabetic patients
- Prevalence of depression in diabetic patients
- Diagnostic criteria of depression
- The impact of depression on diabetes self-care
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## Figure 2. Confidence in practice items

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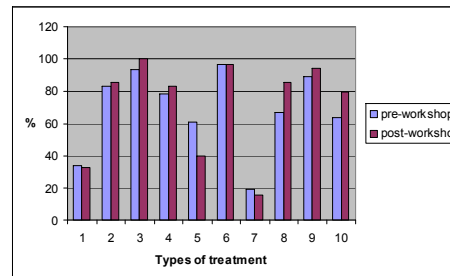


Figure 6. Ratings of usefulness of treatments for depression, comparing pre- and post-workshop.

## Types of treatment for depression Items

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- Natural remedies
- Becoming more physically active
- Having an occasional alcoholic drink to relax, get to sleep or help to cope
- Self-help books
- Long-term counselling
- Change in diet

## Discussion and Conclusion

The aims of the workshop were achieved. Participants' knowledge and confidence regarding the identification and management of depression were significantly improved post-workshop. This was an encouraging result given that many of the patients seen by participants would appear to have suffered from depression and were referred on.

- Interestingly, participants tended to refer more to counsellors and social workers for depression management, rather than psychiatrists or clinical psychologists. This may reflect several factors including less access to these professionals, patients presenting with low-moderate depressive symptoms, and general unawareness of how to contact and refer to psychiatrists and psychologists.

Participants expressed overall satisfaction with the workshop and indicated an interest in further practice-based workshops which teach basic intervention skills.

The challenge remains to determine if such changes in knowledge, confidence and attitudes to the identification and management of depression translate into practice and are sustained on a long-term basis. This could be ascertained through longitudinal follow-up of workshop participants, although this in itself presents certain logistical and costly issues.

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