Cognitive behavioural therapy skills training for adolescent depression

Leanne Rowe, *MBBS, DipRACOG, FRACGP, is a general practitioner, Bannockburn, Victoria, Senior Lecturer, Departments of Psychological Medicine, Monash University, and Department of General Practice, University of Melbourne, and Chair, RACGP, Victoria.*
Bruce Tonge, *MBBS, MD, DPM, MRCPsych, FRANZCP, CertChildPsych, FRANZCP, is Professor and Head, Monash University Department of Psychological Medicine and Centre for Developmental Psychiatry, Victoria.*

BACKGROUND Adolescent depression is mainly managed in primary care. However, there are many problems associated with access to general practice and detection, assessment and treatment of youth depression by general practitioners. Clinical guidelines recommend the use of cognitive behavioural therapy (CBT) in treating adolescent depression. Stage 1 of the 'Time for a Future' project involved establishing a new service in Geelong, Victoria, 'The Clockwork Young People's Health Service'. The service aimed to address the barriers to optimal management of adolescent depression.
OBJECTIVE This article aims to outline Stage 2 of the Time for a Future project which involved training of 'Clockwork' GPs and other practitioners in CBT skills.
DISCUSSION The training program was well received by 68 community and Clockwork GPs, who reported significant changes in their confidence to detect, assess and treat adolescent depression. Ten GPs from Clockwork were a small but important subset of the study because the Clockwork model overcame many of the structural barriers that deter optimal management of adolescent depression by GPs. When real and perceived barriers were addressed concurrently with training, further positive outcomes were possible.

Depression is an increasingly common disorder, affecting 24% of young people during adolescence.[1] It is a major predictor of adolescent suicidal behaviour and suicide.[2] Australian youth suicide rates have more than tripled in the past 30 years and Australia has the fourth highest suicide rate for young males in the western world.[3–5]

Adult depression is the most common form of psychiatric disorder in primary care and one of the most common conditions encountered by general practitioners.[6] Its treatment has been extensively studied.[7] Less is known about adolescent depression, which has only been acknowledged in the literature over the past 20 years and is poorly detected and treated by GPs.[1,8]

As with adult depression, adolescent depression often coexists with a number of other problems, such as the abuse of illicit substances.[9] In a review of the literature, the Victorian Suicide Prevention Taskforce[1] noted that depression seriously impairs education, employment, social participation and adversely affects family life and peer relationships. Depressed adolescents perform poorly at school, dropout of school early, lose jobs or remain unemployed, and are at greater risk of homelessness.

General practice, community health, education, and welfare services vary in their ability to detect, assess and treat depression in adolescents.[10] Forty-seven percent of young people who died by suicide in Victoria in 1993–1995 had visited a GP in the previous six months.[11]

General practice management of adolescent depression is clearly a very important issue given the increasing prevalence and serious outcomes of untreated depression. However, there are many barriers that prevent optimal management of adolescent depression in general practice.

The 'Time for a Future' program

The 'Time for a Future' project aimed to evaluate a multidisciplinary training program for GPs on adolescent depression within the broader context of changing the service environment and overcoming barriers.

In Stage one, a new service (Clockwork Young People's Health Service) was developed to change the way GPs work to address the barriers deterring optimal management of adolescent depression. The Clockwork service:

- is GP driven and multidisciplinary
- is youth specific
- is colocated with other youth services in Geelong, Victoria
- offers holistic health care from preven-

tion to tertiary care for a wide range of complex health and social issues
- provides education and training for GPs[12]
- was successfully externally evaluated in 1998.[13]

Stage two of the study introduced additional cognitive behavioural therapy (CBT) skills for GPs working at Clockwork and in the community.

CBT training program content development

The 'Time for a Future' project developed a four workshop training program designed to enhance GPs' knowledge and skills in the detection, assessment and cognitive behavioural treatment of adolescent depression. The program was based on the curriculum for the treatment of youth depression developed by the Monash University Centre for Developmental Psychiatry (CDP), a wide range of books on the techniques of CBT[14–18] and a pilot course. The courses were run by psychologists from the CDP.

The training on adolescent depression required four 2.5 hour sessions (workshops). The topics for these workshops are listed in Table 1. Each trainee received a package of resource materials, relevant for use in their own clinical setting. These resource materials described cognitive behavioural strategies including cognitive therapy, pleasant events scheduling, relaxation training, social skills training and family problem solving. Packages were also designed to include workshop notes, therapy tip sheets and reading material.

The course was designed for GPs, youth mental health workers, and school staff, so that it could be delivered in a multidisciplinary setting. The evaluation focussed on self reported changes in the practice of GPs at Clockwork and in the community.

Table 1.Workshop topics

Workshop 1

Detection and assessment of adolescent depression

Cognitive behavioural model of depression

Assessment/treatment link including screening tools, mood diary, suicide lethality check list

Cognitive behavioural approach to treatment:
- empirical
- educative
- collaborative and 'home tasks'
- problem solving
- individualised, goal setting
- explores self, world and future

Cognitive therapy incorporating:
- describing the process of working with young people
- detecting distortions in thinking
- disputing the distortions by questioning the evidence
- discovering helpful ways of thinking including brainstorming, evaluating alternatives, affirmations
- doing home tasks, self monitoring sheets
- discussing progress at next session

Case examples were also used to illustrate the strategies.

Workshop 2

Pleasant events scheduling and review

Relaxation training including breathing, progressive muscle, autogenic and guided imagery

Social skills training for micro and macro skills

Homework tasks were also given to GPs

Role plays to assist GPs with interview skills

Workshop 3

Communication skills

Identifying family communication patterns, active listening, problem solving, communicating feelings

Problem solving skills

Brainstorming solutions, evaluating solutions, choosing solutions, acting, evaluating
Videos and role plays to illustrate the strategies

Workshop 4

Managing parent and adolescent conflict
- the neutral role of the therapist
- the process not the solution and beginning with simple problems
- teaching strategies to the young person first, then encouraging the young person to teach the parent
- providing feedback and encouraging success

Evaluation design

Questionnaires were developed by the project management team to provide self reported answers in relation to detection, assessment and treatment of adolescent depression (Table 2). One questionnaire assessed GP competency, confidence, attitudes and engagement with the subject, pre- and post-training. Another questionnaire was developed for completion by GPs at three month post-training to gain an understanding of longer term

Table 2. Sample questions from the questionnaires

- What different types of depression are you aware of?
- List as many risk factors for adolescent depression as you can think of
- Depression in young people is commonly associated with other diagnoses or symptoms: list those you consider to be the most common
- List as many symptoms of major depressive disorder in adolescents as you can
- Depression in young people is commonly associated with other diagnoses or symptoms: list those you consider to be the most common

self perceived outcomes.

The design of the questionnaires went through a process of conferencing and consultation to develop a broad exploratory study. The questions were brainstormed during the meetings of the management team. They were based on what was thought to be important about adolescent depression and what was supported by the National Health and Medical Research Council Depression Guidelines.[1] The questionnaires were also trialled in a pilot study and feedback from four GPs was included.

General practitioners were also asked to complete case studies within three months of the course if they had seen any depressed young people. The cases from Clockwork and other community GPs were compared. Other outcomes were documented in meetings with the GPs over a six month period following the training.

Table 3. Age, sex and locality of GPs n=68

20–30 years	5%
31–40 years	32%
41–50 years	51%
Over 50 years	7%
Male	58%
Female	42%
Geelong	63%
Frankston	37%

Results

Subjects

Demand for the training program exceeded capacity. The multidisciplinary training program was conducted 10 times, with a total of 180 participants. The participants comprised 57% GPs (n=102), 11% social workers, 10% psychologists, 7% teachers and principals, 7% counsellors and youth workers, 4% medical specialists, 3% nurses, and 1% chaplains.

Of the 102 GPs who completed the course, 68 GPs completed both precourse and postcourse questionnaires. Characteristics of the participants are included in Table 3. Sixty-eight GPs completed the questionnaires immediately after the course and 44 of the 68 completed another qualitative questionnaire three months after the course. Thirty-three GPs (including the 10 GPs from Clockwork) reported that they had seen cases of youth depression in the three months after the course and provided case studies.

Comparison of pre- and post-questionnaires for GPs at Clockwork and in the community

The baseline data revealed poor responses from GPs about symptoms of adolescent depression, different types of depression, risk factors and associated diagnoses. General practitioners had a

Table 4. CBT techniques used by GPs in the three months post-training

	Technique used?		If YES, did it work?			
	No %	Yes %	Rarely %	Sometimes %	Often %	Always %
Goal setting	5	93	5	41	39	9
Communication training	5	61	5	36	18	0
Conflict resolution	27	66	7	41	16	0
Education	18	73	2	27	39	7
Social skills training	48	43	9	30	5	1
Cognitive therapy	25	68	2	32	32	5
Homework	30	64	5	34	20	5
Pleasant events	23	68	2	27	34	7
Problem solving skills	34	57	9	23	25	0
Relaxation training	34	59	9	27	23	2
Life goals planning	48	41	7	18	14	0
Couples therapy	73	16	0	9	5	0
Managing anxiety and depression	34	59	0	18	41	2
Effective behaviour management	48	41	2	20	14	2

perception that adolescent depression was very common but they had poor baseline knowledge of the specific presentations of adolescent depression and how they differ from adults. Pretraining, approximately 55% of GPs reported they felt uncomfortable and incompetent working with adolescents. There were significant changes in self reported outcomes for GPs after training in relation to:

- perception of competence in terms of helping depressed adolescents and level of training in CBT strategies (p=0.000)
- knowledge about differences between adult and adolescent depression (p=0.003)
- appreciation of the relationship between depression and suicide (p=0.144)
- techniques to assess depression (p=0.005)
- asking adolescents directly about suicide (p=0.029)
- increased use of a screening device for depression (p=0.001)
- increased screening by GPS for suicidal ideation or behaviour (p=0.00)
- more options for management of adolescent depression in post-course questionnaires (p=0.010)
- better understanding of the weaknesses of using CBT in their practices (p=0.039), and
- consultation with parents (p=0.003).

After training, GPs reported a wide range of available management options for depressed youth. These options included assessment, support, developing a plan, counselling, CBT, medication and referral. The GPs who responded to the questionnaires three months after training reported high usage of a wide number of CBT techniques (Table 4).

It is not possible to determine if a similar uptake of CBT techniques occurred in the 58 GPs who did not complete the three month questionnaire. However, at least 43% of all participants indicated that they incorporated CBT techniques into their practice.

After three months, 80% of those who responded to the three month follow up questionnaire felt they had gained a greater knowledge of, and links to, other services after the training in a multidisciplinary setting. A number reported that meeting staff from other disciplines helped them develop confidence in the referral process. Others understood more about the roles of different services and what they offer.

Comparison of Clockwork and community case studies

Thirty-three GPs (including 10 GPs from Clockwork) who saw young people with depression over the three months post-course completed 165 case studies.

The case studies of Clockwork GPs were more detailed than community GPs. In general Clockwork GPs used CBT with an array of other options for management. Community GPs used limited parts of CBT within their usual consultations.

Other outcomes of training

The Clockwork GPs also implemented further strategies to improve outcomes for young people including:

- community forums on adolescent depression
- national distribution of a manual on Clockwork and journal articles about the work of Clockwork
- a website on adolescent depression
- posters for GP waiting rooms on adolescent depression
- further training for GPs on comorbid disorders including sexual abuse, truancy, attention deficit hyperactivity disorder, school refusal, eating disorders and substance abuse
- implementation of care planning and case conferencing for young people with persistent mental health problems.

Discussion

Many gaps in our knowledge about adolescent mental health remain[19] and the findings of poor baseline GP knowledge about adolescent depression in this study highlight the need for a national program of training for GPs on adolescent depression.

After CBT training there were significant self reported improvements in GP knowledge, detection, assessment and routine screening for depression and suicidal ideation. This was an important finding given the important public health role of the GP in the treatment of depression[20] and the high rates of youth suicide and suicidal behaviour in Australia.[2]

For the GPs who provided three month follow up information, their perception of competence in terms of helping depressed adolescents and level of training in CBT strategies improved significantly post-training. This relates to the work of McCall et al,[21] Holmwood[22] and Zajecka[23] who identified that attitude in addition to knowledge is a determinant of behavioural change. Post-training, GPs were aware of more options for the management of adolescent depression and their reported use of CBT and consultation with parents significantly improved.

The three month questionnaire revealed 80% of GPs felt they had gained a greater knowledge of, and links to, other services after the training in a multidisciplinary setting. General practitioners identified a number of advantages of collaboration with other services such as more effective outcomes for young people. General practitioners also indicated that they had gained skills to make a more comprehensive assessment and diagnosis of depression in their response to the three month qualitative questions.

Overcoming barriers to using CBT skills

The 10 Clockwork GPs reported factors that helped them overcome the barriers discouraging their use of new skills into practice. The factors that further encouraged their use of CBT were:

- peer support
- integrated multidisciplinary team support from youth workers, community health nurses and psychologists
- the colocation with other youth services

- the long consultation appointment structure
- increased remuneration through care planning and case conferencing
- increased confidence, and
- having a range of management options to offer depressed adolescents.

The community GPs in traditional practice experienced more difficulty with implementing their new skills into practice because of barriers such as time limitations, poor remuneration, isolation and lack of support from psychiatrists and mental health services. Divisions of general practice are well placed to assist GPs overcome many of the barriers that deter GPs from implementing new skills in practice. Future divisional programs could include:

- peer, practice and multidisciplinary support for GPs working with young people
- information about using the new Medicare item numbers such as care planning and case conferencing for depressed adolescents
- CBT skills training, and
- resources for adolescent patients.

Conclusion

This study provides evidence that GPs can be trained to incorporate knowledge about the assessment of youth depression and CBT skills into their practice. It also indicates that with relatively brief training, GPs became more confident and gained satisfaction in dealing with adolescents with emotional and behavioural problems. When the barriers experienced by GPs in providing services to depressed adolescents were addressed at the Clockwork service, there were further positive outcomes. The findings of the 'Time for a Future' program provide us with optimism about the effectiveness of GP training on adolescent depression particularly when practice barriers are addressed.

Conflict of interest: none declared.

Acknowledgment

The authors wish to acknowledge the support of beyondblue, the national depression initiative. This work was also supported by a grant from the Mental Health Branch, Human Services, Victoria.

References

1. National Health and Medical Research Council. Depression in young people: A guide for general practitioners. Canberra: Australian Government Publishing Service, 1997.
2. Victorian Suicide Prevention Taskforce. Suicide prevention: Victorian Taskforce Report. Melbourne: State Government of Victoria, 1997.
3. Mitchell P. Valuing young lives: evaluation of the national youth suicide prevention strategy. Australian Institute of Family Studies, 2000.
4. Blair West G W, Cantor C H, Mellsop G W, Egeson-Annon M L. Lifetime suicide risk in major depression: sex and age determinants. J Affect Dis 1999; 55:171–178.
5. Graham A, Reser J. Suicide: An Australian psychological society paper. Australian Psychologist 2000; 35:1–28.
6. Blacker C V R, Blacker C A W. The prevalence and treatment of depression in general practice. Psychopharmacology 1988; 95(Suppl):S14–S17.
7. Freeling P. Diagnosis and treatment of depression in general practice. Br J Psychiatry 1993; 163(Suppl 20):S14–S19.
8. Cosgrave E, McGorry P, Allen N, Jackson H. Depression in young people. A growing challenge for primary care. Aust Fam Physician 2000; 29(2):123–127.
9. Abraham D H, Fava M. Order of onset of substance abuse and depression in a sample of depressed outpatients. Compr Psychiatry 1999; 40(1):44–50.
10. Patton G. Meeting the challenge of adolescent mental health. Med J Aust 1997; 166:399–400.
11. Tiller J, Krupinski J. A prospective study of completed and attempted suicides in Victoria, a report from the Coroner's working party on suicide. Melbourne: Department of Psychiatry, University of Melbourne, 1996.
12. Rowe L. Clockwork: Time for young people. Geelong: Clockwork Young Peoples' Health Service, 2000.
13. Successworks Pty Ltd. Evaluation of Clockwork Young People's Health Service. Geelong: Department of Human Services, 1998.
14. Clarke G N, Lewinsohn P M. The adolescent coping with depression course: A psychoeducational intervention for unipolar depression in high school students. USA: Castalia Press, 1990.
15. Beck J S. Cognitive therapy: Basics and beyond. New York: Guilford Press, 1995.
16. Hawton K, Salkovikis P M. Cognitive behaviour therapy for psychiatric problems: A practical guide. New York: Oxford University Press, 1996.
17. Reynolds W M. Depression in adolescents: Contemporary issues and perspectives. Adv Clin Psychology 1994; 16:261–316.
18. Stark K, Kendall P C. Treating depressed children: Therapist manual for taking action. Ardmore PA: Workbook Publishing, 1996.
19. Patton G C, Moon L. The health of young Australians. Med J Aust 2000; 172:150–151.
20. Sawyer M G. Mental health promotion for young people: A proposal for tripartite approach. J Paediatr Child Health 1996; 32:368–370.
21. Mc Call L, Clarke D, Rowley G. A questionnaire to measure general practitioners' attitudes to their role in the management of patients with depression and anxiety. Aust Fam Physician 2002; 31(3):299–303.
22. Holmwood C. Challenges facing primary care mental health in Australia. Aust Fam Physician 1998; 27:716–719.
23. Zajecka M. Importance of establishing the diagnosis of persistent anxiety. J Clin Psychiatry 1997; 58(3):S9–S13.
24. Aoun S. General practitioners' needs and perceptions in rural mental health care. Aust J Rural Health 1997; 5(2):80–86.

AFP

Correspondence

Leanne Rowe
PO Box 68
Bannockburn, Vic 3331
Email: lrowe@pipeline.com.au