Adjunctive cognitive therapy is more effective, but more costly, than standard clinical management for relapse prevention in depression

Scott J, Palmer S, Paykel E et al. Use of cognitive therapy for relapse prevention in chronic depression. Brit J Psychiatry 2003 Mar;182:221-7.

QUESTION: How cost effective is cognitive therapy for preventing relapse in depression?

Design

Randomised controlled trial with allocation concealment. Outcome assessors were blind to treatment allocation. The reviewers audited blinding status and assessed inter-rater reliability.

United Kingdom; timeframe not specified.

Participants

158 people aged 21-65 years with partially remitted major depression, despite treatment. All participants had an episode of unipolar major depression satisfying DSM-III-R criteria within the past 18 months, but not in the past 2 months. At randomisation all participants had residual symptoms of at least 8 weeks duration, with a score of 8 or greater on the Hamilton Rating Scale for Depression and 9 or greater on the Beck Depression Inventory. Mean age 43 years; 49% women. People with a history of bipolar disorder or significant Axis I or Axis II comorbidity were excluded, as were those receiving formal psychotherapy and those who had received more than 5 sessions of cognitive therapy in the past.

Participants received clinical management and antidepressants with or without cognitive therapy. The minimum dose of antidepressants was equivalent to 125 mg of amitryptiline. Clinical management comprised 30 minute appointments with a psychiatrist every 4 weeks for 20 weeks and every 8 weeks during 48-week follow up. Cognitive therapy comprised 16 sessions over 20 weeks, with two booster sessions.

Main outcome measures

The major outcomes were relapse rates and healthcare resource use measured prospectively over a 17 month period. The economic analysis comprised direct costs to the National Health Service. Indirect costs and nonhealth service expenditure were not considered.

Main results

In people receiving cognitive therapy, cumulative relapse rates were significantly lower than controls (29% v 47%). The overall mean cost of cognitive therapy was £1164 per person (95% CI £1084 to £1244, see table). The incremental cost effectiveness ratio ranged from £4328 to £5027 per additional relapse prevented.

Conclusions

In people with medication-resistant depression, adding cognitive therapy to standard treatment is more costly, but more effective, than antidepressants and clinical management alone. The cost of providing cognitive therapy is about £12.50 per additional relapse-free day.

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COMMENTARY

Although there is evidence that cognitive behaviour therapy (CBT) can reduce the risk of relapse, the actual costs of preventing such relapse have not been clearly described. This study assesses the cost effectiveness of adding CBT to clinical management and antidepressant medication for relapse prevention. The authors collated the costs of CBT therapists and other health services used. The findings suggest that adjunctive therapy decreases the risk of relapse and promotes more depression-free days. Cognitive therapy is expensive, however, costing £4000-5000 per relapse prevented.

This paper raises a number of intriguing questions about the effectiveness and costs of depression treatment. The first question is whether clinical management is needed if patients receive supervision by the CBT therapist during their CBT training sessions. Clinical management is an important ingredient in the outcome of depression.1 If clinical management could be achieved within CBT sessions, however, the relative cost of CBT may not be much greater than the costs of clinical management plus antidepressant medication. More importantly, alternatives to face to face CBT could be considered. There is increasing evidence that bibliotherapy, computer assisted CBT and internet assisted CBT effectively reduce symptoms of depression.²³ Internet-based interventions are portable, accessible and personalised, and reminders can be automated. Although there are some caveats,4 developing an internet-based relapse prevention package may be a good investment.

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Mean cost of treating people with partially remitted major depression

	Cognitive therapy £(n=77)	Control £(n=77)	Difference: cognitive - control (95% CI)
Cognitive therapy	1164	0	1164 (1084 to 1244)*
Planned clinical management	164	172	-8 (-19 to 2)
Additional clinical management	18	27	-10 (-23 to 3)
Inpatient services	16	177	-161 (-356 to 35)
Day patient services	0	206	-206 (-466 to 54)
Antidepressants	315	331	-16 (-91 to 58)
All medication	329	343	-15 (-90 to 61)
Direct healthcare costs, including cognitive therapy	1898	1119	779 (387 to 1170)*
Direct healthcare costs, excluding cognitive therapy	734	1119	-385 (-769 to -1)*

^{*} P < 0.05