



Title A Systematic Review and Economic Evaluation of Computerised

Cognitive Behaviour Therapy for Depression and Anxiety

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Aim

To assess the clinical effectiveness of computerized cognitive behavior therapy (CCBT) in treating anxiety, depression, and phobias and to compare the cost effectiveness of CCBT with cognitive behavior therapy (CBT) by conventional methods and with treatment as usual (TAU).

Conclusions and results

Sixteen studies met the inclusion criteria, whereof 11 were randomized controlled trials (RCTs) and 5 were pilot studies or cohort studies. Quality of the studies ranged from poor to moderate. An additional 3 studies addressed CCBT as a treatment adjunct for therapist-led CBT (TCBT). Thirteen papers were identified for the cost effectiveness review, but none dealt specifically with CCBT. Some evidence of poor-to-moderate quality shows that CCBT is as effective as TCBT in clinically depressed, anxious, or phobic outpatient and primary care populations. Limited evidence of poor-to-moderate quality shows that CCBT is more effective than TAU in clinically depressed, anxious, or phobic outpatient and primary care populations. CCBT may be as effective or less effective than bibliotherapy, but no evidence shows it to be more effective. CCBT may form a useful component of a stepped-care program. Some evidence supports the effectiveness of Beating the Blues and FearFighter.

No studies gave an economic analysis. The only economic evidence appeared in the 4 sponsor submissions. The data were critically reviewed and used in modeling. CCBT using Stresspac was found to cost more, but patient outcomes were not superior to TAU. The cost per patient of Cope was less than the corresponding costs for CBT and drug therapy. CCBT using FearFighter was stated to be less costly than CBT and drug therapy. Data in the Calipso submission were insufficient to judge the efficiency of Calipso relative to alternative treatments. Economic analysis of CCBT using Beating the Blues indicated that, compared to TAU, Beating the Blues is a cost-effective way to treat patients with anxiety/depression. The report presents estimated annual costs and costs per QALY.

Recommendations

Limited evidence of poor-to-moderate quality shows that CCBT may be effective in treating depression, anxiety, and phobias. The evidence for CCBT is uncertain as the studies varied widely in setting, patient populations, comparators, and outcome measures.

Methods

A systematic literature review identified all studies describing trials of CCBT either alone or as part of a package and either via a computer interface or over the telephone with a computer-led response. Databases were searched from 1966 to September 2001. The cost-effectiveness review included a review of economic evidence and a modeling exercise. The effect of CCBT was estimated in terms of quality-adjusted life-years (QALYs).

Further research/reviews required

1) Determine the level of therapist involvement needed to produce optimal outcomes for patients. 2) Studies within the general practice setting. 3) Efforts to include patients with comorbidities routinely treated within GP care. 4) Identify the position of CCBT in a stepped-care program and its relationship to other efforts to increase access to CBT and psychological therapies. 5) Include appropriate comparison groups in studies, eg, bibliotherapy and other self-help approaches that reduce therapist time. Further suggestions in the full report.

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