Comparison of palmtop-computer-assisted brief cognitive-behavioral treatment to cognitive-behavioral treatment for panic disorder

Newman M G, Kenardy J, Herman S, Taylor C B

Record Status
This is a critical abstract of an economic evaluation that meets the criteria for inclusion on NHS EED. Each abstract contains a brief summary of the methods, the results and conclusions followed by a detailed critical assessment on the reliability of the study and the conclusions drawn.

Health technology
Comparison of palmtop-computer-assisted brief cognitive-behavioural treatment with cognitive-behavioural treatment for panic disorder.

Type of intervention
Treatment.

Economic study type
Cost-effectiveness analysis.

Study population
Patients with primary diagnosis of panic disorder, aged from 18 to 65, and with a mean duration of panic disorder of 7.5 years.

Setting
Community. The study was carried out in Australia.

Dates to which data relate
The years during which the effectiveness data were collected, were not stated. Price dates were not given.

Source of effectiveness data
The evidence for final outcomes was derived from a single study.

Link between effectiveness and cost data
The costing was not undertaken on the same patient sample as that used in the effectiveness study.

Study sample
Power calculations were not used to determine the sample size. The initial sample included 20 patients. Eighteen participants completed the treatment, and were randomly assigned to a CBT12 or CBT4-CA treatment. There were 9 clients in each group.

Study design
The study was a randomized controlled trial. CBT12 treatment took place over 12 weeks and CBR4-CA treatment over 4 weeks. The loss to follow-up in the study was 2 patients.
Analysis of effectiveness
The analysis of the clinical study was based on treatment completers only.

Outcome measures were arranged into three conceptually consistent groups:

(a) Overall fear and panic sensations (i.e. the number of panic attacks, Body Sensations Questionnaire (BSQ), and Fear Questionnaire),

(b) behavioural avoidance (i.e. Mobility Inventory for Agoraphobia (MI) accompanied and alone subscales), and

(c) Panic cognitions (i.e. Agoraphobic Cognitions Questionnaire (ACQ)).

The instrument used to measure the primary outcomes was a two-item measure of treatment credibility. At posttreatment, clients completed a similar three-item treatment satisfaction measure. Both groups were shown to be similar in duration of panic and number of persons meeting criteria for agoraphobia.

Effectiveness results
At posttest CBT12, had a better outcome than CBT4 in terms of panic attacks - Chi squared (1, N=18) =4.0, p<0.05; and the BSQ, chi squared (1, N=18) = 4.0, p<0.05. At follow-up, there were no longer any differences between the two treatments.

Clinical conclusions
Analysis of clinically significant change showed that CBT12 was better than CBT4 at posttest on some measures. However, no difference between the treatment programmes was found at follow-up.

Measure of benefits used in the economic analysis
Since the effectiveness analysis showed no difference in effectiveness between the intervention and the comparator, the economic analysis was based on the difference of costs only.

Direct costs
Costs were not discounted. Quantities and costs were not reported separately. Health services costs per client included fee for service per therapist contact hour, palmtop computer hardware costs, base station costs and miscellaneous costs. Estimation of the quantities and cost data was based on actual data. Source of cost data was not stated. Price dates were not given.

Currency
US dollars ($).

Sensitivity analysis
Sensitivity analysis was not carried out.

Estimated benefits used in the economic analysis
Not applicable.

Cost results
The cost per client was approximately $900 for CBT4-CA and $1,440 for CBT12-CA.
Synthesis of costs and benefits
Not applicable.

Authors' conclusions
Statistical analysis detected significant effects of both treatments at posttest and follow-up with no between-treatment differences. Analysis of clinically significant change showed superiority of CBT12 at posttest; these differences disappeared at follow-up. Both treatments eliminated the occurrence of panic attacks in 67% of the clients. Assuming that both treatments are equally effective, the authors concluded that CBT4-CA is the more cost-effective treatment.

CRD COMMENTARY - Selection of comparators
A justification for the comparator was given. Multicomponent CBT was the gold standard for treatment of panic disorder.

Validity of estimate of measure of benefit
Because of the small size of the sample, the results need to be treated with some caution.

Validity of estimate of costs
Very few details of the costs of either programme were given, rendering adequate assessment of the validity of estimate of costs difficult. Moreover, the costs were not included as an important element of the analysis.

Other issues
The authors acknowledged that replicating and extending the results of this study might not be possible due to the sample size.

Source of funding
Supported in part by funds from the National Health and Medical Research Council, Canberra, Australia and the University of Newcastle Research Management Committee, Newcastle, Australia.

Bibliographic details

PubMedID
9103747

Indexing Status
Subject indexing assigned by NLM

MeSH
Adult; Analysis of Variance; Behavior Therapy /methods /standards; Chi-Square Distribution; Female; Follow-Up Studies; Humans; Male; Middle Aged; Panic Disorder /therapy; Therapy, Computer-Assisted /standards; Treatment Outcome

AccessionNumber
21997006659