Schizophrenia Bulletin vol. 38 no. 5 pp. 908–910, 2012
doi:10.1093/schbul/sbs090

Cognitive Behavior Therapy Versus Other Psychosocial Treatments for Schizophrenia

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Key words: schizophrenia/cognitive behavior therapy/psychological therapy/meta-analysis

Background

Cognitive behavioral therapy (CBT) is now a recommended treatment for people with schizophrenia. In CBT, links are made between the person's feelings and patterns of thinking that underpin their distress. At present, a variety of interventions have been labeled as CBT and it is difficult to provide a single, unambiguous definition. In recognition, the review authors have constructed criteria that are felt to be both workable and to capture the elements of good practice in CBT.

Cognitive behavioral therapy is becoming increasingly available for people with schizophrenia, with recent recommendations of treatment guidelines in, for example, the United Kingdom suggesting that CBT should be more widely available for people with schizophrenia.

It should be noted that many of the trials of CBT for psychosis have incorporated additional active therapeutic elements (eg, psychoeducation and relapse prevention) that would be considered adjunctive to techniques that are specifically targeted at eliciting belief change (eg, guided discovery or behavioral experiments).

The comparison arm of the trials reported other psychosocial therapies, such as supportive therapy, psychoeducation, family therapy, and other "talking therapies." The full review distinguishes between trials that described "active" psychosocial interventions (eg, family therapy) aimed at a meaningful symptom reduction and those trials that have used "nonactive" psychosocial interventions (eg, supportive therapy), which act as merely a control for the nonspecific effects of therapy (eg, time spent with therapist). Outcomes are presented separately for active and nonactive psychosocial interventions and the pooled effect of these trials is also presented.

Search Methods

We searched the Cochrane Schizophrenia Group Trials Register (March 2010) that is based on regular searches of CINAHL, EMBASE, MEDLINE, and PsycINFO. We inspected all references of the selected articles for further relevant trials, and, where appropriate, contacted authors.

Selection Criteria

All relevant randomized controlled trials of CBT for people with schizophrenia-like illnesses.

Data Collection and Analysis

Studies were reliably selected and assessed for methodological quality. Two review authors, working independently, extracted data. We analyzed dichotomous data on an intention-to-treat basis and continuous data with 65% completion rate are presented. Where possible, for dichotomous outcomes, we estimated a risk ratio (RR) with the 95% confidence interval (CI) along with the number needed to treat/harm.

Main Results

Thirty articles described 20 trials. Trials were often small and of limited quality. In figure 1 the various risks of bias are presented as percentages across all included studies.

The main findings of this review are summarized in table 1. When CBT was compared with other psychosocial therapies, no difference was found for outcomes relevant to adverse effect/events (2 RCTs, $n = 202$, RR death 0.57 CI 0.12–2.60). Relapse was not either reduced over any time period (5 RCTs, $n = 183$, RR long term 0.91 CI 0.63–1.32) nor was rehospitalization (5 RCTs, $n = 294$, RR in longer term 0.86 CI 0.62–1.21). Various global mental

Table 1. Summary of Findings

Cognitive behavioral therapy compared with other psychosocial therapies for schizophrenia

Patient or population: patients with schizophrenia
Settings: in either community or in hospital settings
Intervention: cognitive behavioral therapy
Comparison: other psychosocial therapies

	Illustrative Comparative Risks[a] (95% CI)					
	Assumed Risk	Corresponding Risk				
Outcomes	**Other Psychosocial Therapies**	**Cognitive Behavioral Therapy**	**Relative Effect (95% CI)**	**No. of Participants (Studies)**	**Quality of the Evidence (GRADE)**	**Comments**
Adverse effect/event:	**Low**[1]		**RR 2**	198 (1 study)	⊕⊖⊖⊖	
2. Adverse effects—any—medium term only	**10 per 1000**	**20 per 1000** (7–56)	(0.71—5.64)		**very low**[2,3,4,5]	
Follow-up: 26–52 weeks	**Moderate**[1]					
	50 per 1000	**100 per 1000** (35–282)				
	High[1]					
	100 per 1000	**200 per 1000** (71–564)				
Global state:	**Low**		**RR 0.91**	350 (5 studies)	⊕⊕⊖⊖**low**[2,5]	
1. Relapse—long term	**100 per 1000**	**91 per 1000** (63–132)	(0.63—1.32)			
Follow-up: 12 months[6]	**Moderate**					
	500 per 1000	**455 per 1000** (315–660)				
	High					
	700 per 1000	**637 per 1000** (441–924)				
Global state:	**Low**[1]		**RR 0.86**	294 (5 studies)	⊕⊕⊖⊖**low**[2,5]	
2. Rehospitalization—long term	**100 per 1000**	**86 per 1000** (62–121)	(0.62 to 1.21)			
Follow-up: 12 months[6]	**Moderate**[1]					
	300 per 1000	**258 per 1000** (186–363)				
	High[1]					
	500 per 1000	**430 per 1000** (310–605)				
Mental state:	**Low**[1]		**RR 0.84**	244 (4 studies)	⊕⊖⊖⊖	
1. General—No important or reliable change—long term	**400 per 1000**	**336 per 1000** (256–436)	(0.64 to 1.09)		**very low**[2,5,7]	
	Moderate[1]					
	600 per 1000	**504 per 1000** (384–654)				
Follow-up: 12 months[6]	**High**[1]					
	800 per 1000	**672 per 1000** (512–872)				
Social functioning: 1a. Average scores (Social Functioning Scale, high = good)		The mean social functioning: 1a. average scores (social functioning scale, high = good) in the intervention groups was **8.8 higher** (4.07 lower to 21.67 higher)		65 (1 study)	⊕⊖⊖⊖ **very low**[2,5,8]	No studies reported "employment" as was prestated to be of interest for the table in review protocol.
Follow-up: median 26 weeks						
Quality of life: Average score (EuroQOL, high = good)—long term only		The mean quality of life: average score (euroqol, high = good)—long term only in the intervention groups was **1.86 lower** (19.2 lower to 15.48 higher)		37 (1 study)	⊕⊖⊖⊖ **very low**[2,3,5]	
Follow-up: 26 weeks						

[a]The basis for the **assumed risk** (eg, the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).
CI: Confidence interval; **RR:** Risk ratio.

GRADE Working Group grades of evidence
High quality: Further research is very unlikely to change our confidence in the estimate of effect.
Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.
Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.
Very low quality: We are very uncertain about the estimate.

Table 1. Continued

[1]Medium risk: roughly equates with that of the trial control groups.
[2]Limitation in design—rated "serious": studies short, randomization poorly described, blinding at outcome—single at best and untested.
[3]Imprecision—rated "serious": one small study.
[4]Imprecision—rated "serious": no other studies made any report of adverse effects.
[5]Publication bias: rated "likely": all trials were small—searches may fail to identify other small less positive trials.
[6]Long term: defined as over 1 year.
[7]Indirectness—rated "serious": various measures used with differing criteria.
[8]Indirectness—rated "serious": scale derived data—not "employment" as stated in protocol.

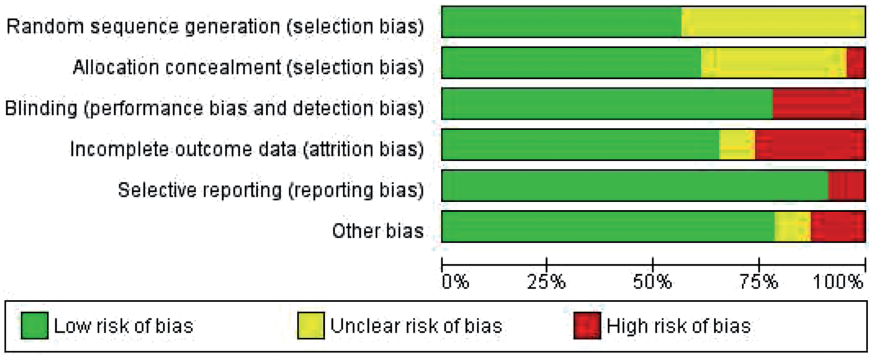

Fig. 1. Risk of bias chart.

state measures failed to show difference (4 RCTs, $n = 244$, RR no important change in mental state 0.84 CI 0.64–1.09). More specific measures of mental state failed to show differential effects on positive or negative symptoms of schizophrenia, but there may be some long-term effect for affective symptoms (2 RCTs, $n = 105$, mean difference (MD) Beck Depression Inventory (BDI) −6.21 CI −10.81 to −1.61). Few trials report on social functioning or quality of life. Findings do not convincingly favor either of the interventions (2 RCTs, $n = 103$, MD Social Functioning Scale (SFS) 1.32 CI −4.90 to 7.54; $n = 37$, MD EuroQOL −1.86 CI −19.20 to 15.48). For the outcome of leaving the study early, we found no significant advantage when CBT was compared with either nonactive control therapies (4 RCTs, $n = 433$, RR 0.88 CI 0.63–1.23) or active therapies (6 RCTs, $n = 339$, RR 0.75 CI 0.40–1.43).

Authors' Conclusions

The use of CBT has been associated with some reduction in symptoms, particularly affective problems associated with having such a serious illness. However, there is considerable variability in the findings of the various studies and, at present, it is not possible to assert any substantial benefit for cognitive behavioral therapy over other psychological therapies. Full details are published in the Cochrane Review (Jones, 2012).

Reference

1. Jones C, Hacker D, Cormac I, Meaden A, Irving CB. Cognitive behaviour therapy versus other psychosocial treatments for schizophrenia. *Cochrane Database of Systematic Reviews.* 2012; doi: 10.1002/14651858.CD008712.pub2.