

Therapist-supported internet cognitive-behavioural therapy for anxiety disorders in adults

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[†]This review is an abridged version of a Cochrane Review previously published in the *Cochrane Database of Systematic Reviews*, 2015, Mar 5, Issue 3: CD011565 (see www.thecochranelibrary.com for information). Cochrane Reviews are regularly updated as new evidence emerges and in response to feedback, and the Cochrane Database of Systematic Reviews should be consulted for the most recent version of the review.

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See commentary on pp. 291–294, this issue.

Background

Cognitive-behavioural therapy (CBT) is an evidence-based treatment for anxiety disorders. Many people have difficulty accessing CBT, so researchers have explored the possibility of using the internet to deliver it as ICBT. It is important to ensure that the decision to promote ICBT is grounded in high-quality evidence.

Objectives

To assess the effects of therapist-supported ICBT on remission of anxiety disorder diagnosis and reduction of anxiety symptoms in adults as compared with waiting-list control, unguided CBT or face-to-face CBT. Effects of treatment on quality of life and patient satisfaction with the intervention were also assessed.

Search methods

We searched the Cochrane Depression, Anxiety and Neurosis Review Group Specialized Register (CCDANCTR) to 12 April 2013. The CCDANCTR includes relevant randomised controlled trials (RCTs) from EMBASE (1974–), MEDLINE (1950–) and PsycINFO (1967–). We also searched online clinical trial registries and reference lists of included studies. We contacted authors to locate further trials. An update of an initial search (April 2013), conducted in September 2014, identified seven new completed studies, seven previously ongoing studies now completed, and four new ongoing studies. This is a fast-moving area; we plan to update this review shortly, incorporating these new studies.

Selection criteria

Two authors independently assessed each identified study for inclusion. Studies had to be RCTs of therapist-supported ICBT compared with: a waiting list, attention, information, or online discussion group; unguided CBT (that is, self-help); or face-to-face CBT. We included studies that treated adults with an anxiety disorder (panic disorder, agoraphobia, social phobia, post-traumatic stress disorder (PTSD), acute stress disorder, generalised anxiety disorder, obsessive-compulsive disorder and specific phobia) defined according to DSM-III, III-R, IV, IV-TR or ICD-9 or 10.

Data collection and analysis

Two authors independently assessed the risk of bias of included studies and judged overall study quality. We used data from intention-to-treat analyses where possible. We assessed treatment effect for the dichotomous outcome of clinically important improvement in anxiety using a risk ratio (RR) with 95% confidence interval (CI). For disorder-specific and general anxiety symptom measures and quality of life we assessed continuous scores using standardised mean differences (SMD). We examined statistical heterogeneity using the I^2 statistic.

Main results

We screened 1000 citations and selected 30 studies ($n=2181$ participants) for inclusion. The studies examined social phobia (11 trials), panic disorder with or without agoraphobia (8 trials), generalised anxiety disorder (4 trials), PTSD (1 trial) and specific phobia (1 trial). Five remaining studies included a range of anxiety disorder diagnoses. Studies were conducted in Sweden (15 trials), Australia (12 trials), Switzerland (2 trials) and The Netherlands (1 trial) and investigated a variety of ICBT protocols. Three primary comparisons were identified: experimental v. waiting-list

control, experimental v. unguided ICBT, and experimental v. face-to-face CBT. Moderate-quality evidence from 9 studies ($n=644$) contributed to a pooled RR of 4.18 (95% CI 2.42 to 7.22) for clinically important improvement in anxiety post-treatment, favouring therapist-supported ICBT over a waiting list, attention, information, or online discussion group only. Similarly, the SMD for post-treatment disorder-specific symptoms (22 studies, $n=1573$; SMD -1.12 , 95% CI -1.39 to -0.85) and general anxiety symptoms (14 studies, $n=1004$; SMD -0.79 , 95% CI -1.10 to -0.48) favoured therapist-supported ICBT. The quality of the evidence for both outcomes was low. One study compared unguided CBT with therapist-supported ICBT for clinically important improvement in anxiety post-treatment, showing no difference in outcome between treatments ($n=54$; very low-quality evidence). Post-treatment there were no clear differences between unguided CBT and therapist-supported ICBT for disorder-specific anxiety symptoms (4 studies, $n=253$; SMD -0.24 , 95% CI -0.69 to 0.21 ; low-quality evidence) or general anxiety symptoms (2 studies, $n=138$; SMD 0.28 , 95% CI -2.21 to 2.78 ; low-quality evidence). Compared with face-to-face CBT, therapist-supported ICBT showed no significant differences in clinically important improvement in anxiety post-treatment (4 studies, $n=365$; RR 1.09, 95% CI 0.89 to 1.34; moderate-quality evidence). There were also no clear differences post-treatment between face-to-face and therapist-supported ICBT for disorder-specific anxiety symptoms (6 studies, $n=424$; SMD 0.09, 95% CI -0.26 to 0.43 ; low-quality evidence) or general anxiety symptoms (5 studies, $n=317$; SMD 0.17, 95% CI -0.35 to 0.69 ; low-quality evidence). Overall, risk of bias in included studies was low or unclear for most domains. However, due to the nature of psychosocial intervention trials, masking of participants and personnel, and outcome assessment tended to have a high risk of bias. Heterogeneity across a number of the meta-analyses was substantial: some was explained by type of anxiety disorder and some may be a meta-analytic measurement artefact due to combining many assessment measures. Adverse events were rarely reported.

Authors' conclusions

Therapist-supported ICBT appears to be efficacious for anxiety in adults. The evidence comparing therapist-supported ICBT with waiting-list, attention, information, or online discussion group only control was low to moderate quality, the evidence comparing therapist-supported ICBT with unguided ICBT was low to very low quality, and comparisons of therapist-supported ICBT with face-to-face CBT were low to moderate quality. Further research is needed to better define and measure any potential harms resulting from treatment. These findings suggest that therapist-supported ICBT is more efficacious than a waiting list, attention, information, or online discussion group only control, and that there may not be a significant difference in outcome between unguided CBT and therapist-supported ICBT; however, this latter finding must be interpreted with caution due to imprecision. The evidence suggests that therapist-supported ICBT may not be significantly different from face-to-face CBT in reducing anxiety. Future research should involve equivalence trials comparing ICBT and face-to-face CBT, examine the importance of the role of the therapist in ICBT, and include effectiveness trials of ICBT in real-world settings.

Assessed as up to date: 12 April 2013