Psychotherapy versus second-generation antidepressants in the treatment of depression: a meta-analysis

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CRD summary
The authors concluded that bona fide psychotherapy appeared as effective as second-generation antidepressants in the short-term treatment of depression and was likely to be somewhat more effective than second-generation antidepressants in the longer-term management of depressive symptoms. The reliability of the conclusions is uncertain given a number of weaknesses in the review methodology.

Authors' objectives
To assess the effects of psychotherapy compared to second-generation antidepressants in the treatment of depression.

Searching
MEDLINE and Cochrane Central Register of Clinical Trials (CENTRAL) were searched up to November 2009 for studies published after 2005. A database of studies identified by a previous meta-analysis (which searched for studies published between 1966 to May 2007) was searched. Search terms were reported. Eligible studies included in two most recent meta-analyses were considered.

Study selection
Studies that compared a second-generation antidepressant medication to psychotherapy in participants (aged at least 18 years) with major depressive disorder were eligible for inclusion. Further inclusion criteria were adequate reporting of data to enable calculation of effect sizes and no augmentation of second-generation antidepressant treatment with medication that was not an second-generation antidepressant. Outcome measures included rates of treatment response, remission and treatment discontinuation.

Details about study settings were not reported. Included psychotherapy interventions were varied (cognitive and/or behavioral, psychodynamic, interpersonal and supportive interventions). Second-generation antidepressant medications were varied (fluoxetine, venlafaxine, paroxetine, nefazodone, sertraline, citalopram). Drug doses in all included studies were in the United States Food and Drug Administration-approved ranges for efficacious treatment of depression. Most studies permitted dose increases to optimise response to antidepressant medication. The number of drug group visits ranged (where reported) from three to 20. Treatment switching occurred in only two studies. Studies had a wide range of depression symptoms and severity and only one was exclusively severe depression. Trial duration ranged from six to 26 weeks. Most studies had government sponsorships.

The authors did not state how many reviewers assessed studies for inclusion.

Assessment of study quality
Adequacy of treatment quality was assessed by two reviewers; disagreements were resolved by discussion.

Data extraction
Two reviewers independently extracted data to enable calculation of effect sizes (one effect size per study). Moderator variables were coded and efficacy and tolerability data were extracted independently by two reviewers. Disagreements were resolved by discussion.

Methods of synthesis
Pooled effect sizes (weighted by individual study inverse variance) were calculated (using random-effect model) separately at study end point (immediately after treatment was concluded) and at the final follow-up visit. Separate analyses were done for bona fide and non bona fide therapies. Bona fide psychotherapeutic treatments were defined as those that were delivered by a trained therapist with at least a undergraduate degree, that were individualised and delivered in face-to-face meetings and contained psychologically valid components (further details reported in paper). Heterogeneity was assessed with Q and $I^2$. 

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Results of the review
Fifteen studies (1,975 participants) were included.

No significant differences were found between psychotherapy and pharmacotherapy with regard to response or remission rates, depression outcomes and study completion rates.

Compared to second-generation antidepressants, bona fide psychotherapies demonstrated similar efficacy in short-term (d=-0.05, p=0.57, I²=68.32%) and slightly better efficacy on depression rating scales at follow-up (d=0.29, p=0.01, I²=30.29%).

Compared to medication, non-bona fide therapies showed significantly worse short-term outcomes (d=0.58, I²=82.76%) and lower rates of study completion (odds ratio=0.55, I²=0%)

Authors’ conclusions
Bona fide psychotherapy appeared as effective as second-generation antidepressants (SGAs) in short-term treatment of depression and was likely to be somewhat more effective than second-generation antidepressants in longer-term management of depressive symptoms.

CRD commentary
The review inclusion criteria was broadly defined. Eligible study designs were not clearly predefined. Two major databases were searched. It was unclear whether unpublished studies were sought, so publication bias could not be ruled out. It was unclear whether articles published in languages other than English were considered, so language bias could not be excluded. Data extraction was done in duplicate minimising potential for reviewer error and bias; it was unclear whether similar processes were used in study selection raising the possibility of error and bias. Treatment quality was assessed, but other aspects of study designs were not and hence internal validity of included studies was unclear. The decision to combine study results statistically may not have been appropriate given considerable differences between studies.

The reliability of the authors’ conclusions is uncertain.

Implications of the review for practice and research
The authors did not state any implications for practice and research.

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Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.