INPLASY PROTOCOL

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Effectiveness of CBT and its modifications for prevention of relapse/recurrence in depression: A meta-analysis of randomized controlled trials

Chen, HG[1]; He, Q[2]; Wang, MT[3]; Wang, X[4]; Pu, CQ[5]; Li, SF[6]; Li, MQ[7].

Review question / Objective: The purpose of this meta-analysis was to integrate the short-term and long-term effects of CBT and its modifications on the prevention of relapse/recurrent in depression and also to explore whether its effects was equivalent to or superior to those of antidepressants.

Condition being studied: Depression is currently a common chronic disease in most societies, with a high prevalence among individuals of all ages and races. And the high recurrence rate is one of its main characteristics. Therefore, preventing recurrence is one of the essential goals of the long-term treatment of depression. In the past 20 years, CBT has become a first-line treatment recommended by the guidelines for treating mental disorders. But various forms of modifications of CBT appeared in recent years, the efficacy of it in preventing depression is still controversial. The entire work was completed independently by the first investigator and a second co-investigator, and a third investigator participated in discussions to make a final decision if there was disagreement.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 March 2022 and was last updated on 17 March 2022 (registration number INPLASY202230083).

INTRODUCTION

Review question / Objective: The purpose of this meta-analysis was to integrate the short-term and long-term effects of CBT and its modifications on the prevention of relapse/recurrent in depression and also to explore whether its effects was equivalent to or superior to those of antidepressants.

Rationale: Antidepressants are currently recommended as the first-line treatment for patients with depression. However,

clinical outcomes showed that only 22%-40% of patients gradually recover after medication alone. Psychotherapy may have potential long-term benefits compared to pharmacotherapy that seems to lose its efficacy after discontinuation. Cognitive Behavioral Therapy (CBT), as a combination therapeutic strategy of cognitive therapy and behavioral therapy, is one of the most commonly used clinical psychological therapy to reduce the incidence of mood and behavioral disorders through managing the individual adaptability of thinking and behavior patterns and to enhance psychological well-being further.

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METHODS

Search strategy: Studies were identified from PubMed, Web of Science, MEDLINE, China Knowledge Resource Integrated Database (CNKI), VIP Database, and Wanfang Database and using the following search string: (cognitive behavioral therapy) OR (CBT) AND (depression) OR (depressive) AND (relapse) OR (recurrence) from January 1, 2009, to June 30, 2020, only in English and Chinese.

Participant or population: Aged >18 years old and diagnosed with depression according to specific criteria. Childhood/ adolescent depression, prenatal or postnatal depression, and depression secondary to physical illness or other psychiatric disorders were excluded.

Intervention: Cognitive Behavioral Therapy (CBT) and its modifications (such as Internet-based CBT, and Mindfulness-based cognitive therapy (MBCT), Preventive cognitive therapy (PCT)) regardless of their modes, form, the number of sessions, duration.

Comparator: At least one non-CBT and its modifications (like treatment as usual (TAU), antidepressant medication (ADM), other psychotherapy).

Study designs to be included: Randomized controlled trials (RCTs).

Eligibility criteria: Relevant articles included according to inclusion criteria (like aged >18 years old and diagnosed with depression according to specific criteria, at least one non-CBT and its modifications) and exclusion criteria (like case series or case reports, depression comorbidity with other diseases).

Information sources: Studies were identified from PubMed, Web of Science, MEDLINE, China Knowledge Resource Integrated Database (CNKI), VIP Database, and Wanfang Database and using the following search string: (cognitive behavioral therapy) OR (CBT) AND (depression) OR (depressive) AND (relapse) OR (recurrence) from January 1, 2009, to June 30, 2020, only in English and Chinese.

Main outcome(s): Efficacy of CBT and its modifications in preventing relapse/ recurrence of depression. The effect size for dichotomous outcomes was measured by RR, and 95% confidence interval (CI) was presented.

Additional outcome(s): None.

Quality assessment / Risk of bias analysis: Cochrane Collaboration Risk of Bias Tool.

Strategy of data synthesis: Cochran Q test and the I2 statistics would be used to assess the heterogeneity of the included studies, where p>0.1 of the Q statistics and I2 value 50%. Otherwise used fixed model. Meta-regression analysis to detect the source of heterogeneity. Publication bias funnel plots were conducted to detect the publication bias. A symmetrical funnel plot is likely to indicate low publication bias while an asymmetric funnel plot is likely to indicate publication bias. All statistical analyses were performed using RevMan 5.4 and Stata 16.

Subgroup analysis: According to the results of meta-regression analysis and the availability of data, subgroup pooled relative risks (RRs) were calculated by different intervention methods and follow-up time.

Sensitivity analysis: The sensitivity of this article was reflected by the change in effect size after removing one of the included articles.

Language: Only in English and Chinese.

Country(ies) involved: China.

Keywords: Cognitive-behavioral therapy, Depression, Relapse, Recurrence, Meta-analysis.

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