The effects of cognitive behaviour therapy for major depression in older adults

Submitted by

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List of abbreviations

AMD: Age-related macular degeneration
BDI: Beck Depression Inventory
CBT: Cognitive behavioural therapy
CBGT: Cognitive–behavioural group therapy
CI: confidence interval
DSM-IV-TR: Diagnostic and Statistical Manual of Mental Disorders
DSSI: Duke Social Support Index
ECT: Electroconvulsive therapy
GDS: Geriatric Depression Scale
HDRS: Hamilton Depression Rating Scale
ICD-10 International Statistical Classification of Diseases and Related Health Problems
JBI: Joanna Briggs Institute
JBI-MAStARI: The Joanna Briggs Institute Meta-Analysis of Statistics Assessment and Review Instrument
LSI: Life satisfaction index
MADRS: Montgomery Åsberg Depression Rating Scale
MD: Major depression
MDD: Major depressive disorder
MDSEQ: Macular Degeneration Self-Efficacy Scale
OAPES: Older Adult Pleasant Events Schedule
RCT: Randomised controlled trial
SD: Standard deviation
LOT-R: The Life Orientation Test Revised

TAU: Treatment as usual
WMD: Weighted mean differences
WHOQOL: World Health Organisation Quality of Life scale
AGECAT: Automated Geriatric Examination for Computer Assisted Taxonomy)

Dedication

"This thesis is dedicated to my dear parents and my loving family who provided me the opportunities, facilities and encouragement for a good education"

THE UNIVERSITY OF ADELAIDE

Faculty of Health Sciences

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Thesis declaration

I certify that this thesis entitled:

The effects of cognitive behaviour therapy for major depression in older adults

and submitted for the degree of Master of Clinical Science (Evidence Based Healthcare), is the result of my own research. This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution to Rasika Sirilal Jayasekara and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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Rasika Sirilal Jayasekara

Date: 01 December 2011

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Executive summary

The effects of cognitive behaviour therapy for major depression in older adults

Objectives

The objective of this systematic review was to examine the effects of cognitive behavioural therapy (CBT) for older adults with depression when compared to standard care, specific medication and other therapies.

Inclusion criteria

This review considered only randomised controlled trials (RCTs) assessing the effectiveness of CBT as a treatment for older adult with major depression when compared to standard care, specific medication, other therapies and no intervention. The review included trials in which patients were described as elderly, geriatric, or older adults, or in which all patients were aged 55 or over. Major depression was diagnosed according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) and the World Health Organization's International Statistical Classification of Diseases and Related Health Problems (ICD-10) criteria.

Search strategy

The search was limited to English language papers published from 2003 to July 2011. A three-step search strategy was developed using MeSH terminology and keywords to ensure that all materials relevant to the review were captured. An initial limited search of MEDLINE and CINAHL was undertaken followed by an analysis of the text words contained in the title and abstract, and of the index terms used to describe the article. A second search using all identified keywords and index terms was then undertaken in major databases (MEDLINE; CINAHL; Cochrane Central Register of Controlled Trials; Controlled Trials; EMBASE; Current Contents; PsycINFO; Ageline). Thirdly,

the reference list of all identified reports and articles were searched for additional studies.

Methodological quality

Each paper was assessed by two independent reviewers for methodological quality prior to inclusion in the review using The Joanna Briggs Institute Meta-Analysis of Statistics Assessment and Review Instrument (JBI-MAStARI). Meta-analyses were performed using Review Manager 5 software (2011).

Results

A total of seven randomised controlled trials (RCT) were included in the review. Two trials involving 159 older adults with depression compared CBT versus treatment as usual (TAU) using Beck Depression Inventory (BDI) and the pooled data of two trials found no statistically significant differences in reduction of depression after 3-4 months of the intervention (Weighted mean differences [WMD] -2.61, 95% CI -5.82 to -0.6) and 6-10 month follow-up (WMD -3.05, 95% confidence interval [CI] -6.41 to -0.32). Three trials involving 97 older adults with depression compared CBT and TAU in reduction of depression using Geriatric Depression Scale (GDS) and found a significant difference between CBT and control groups (WMD -2.83, 95% CI -4.02 to -1.64), however significant heterogeneity was observed (chi-square 10.09, df=2, I^2=80% p=0.006) in both fixed and random effects models. Individually, four trials that compared the CBT with TAU found that CBT is an effective treatment for older adults with depression.

Conclusion

The key finding of this review is that cognitive-behavioural therapies are likely to be efficacious in older people when compared to treatment as usual. This finding is consistent with the findings of several systematic reviews and meta-analyses undertaken across a wider age range. However, the small size of included trial, the nature of the participants, and the heterogeneity of the interventions has considerable implications with regard to generalising these findings to clinical populations.

Keywords

Cognitive behavioural therapy, Depression, Older Adult, Systematic review