The clinical effectiveness and cost-effectiveness of low-intensity psychological interventions for the secondary prevention of relapse after depression: a systematic review

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Executive summary

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Executive summary

Background

The term 'depression' can refer to a range of mental health problems primarily characterised by persistent depressed mood and loss of interest in activities, among other associated emotional, cognitive, physical and behavioural symptoms. It is the most common mental disorder in community settings, and a major cause of disability across the world. The objective of treatment is to achieve remission or at least adequate control of depressive symptoms; however, even after successful treatment, the risk of relapse after remission is significant. In many of these individuals this pattern becomes worse, with subsequent recurrent depressive episodes, increasing in severity and frequency, and a lack of responsiveness to treatments.

The majority of patients diagnosed with depression receive psychological, pharmacological or combined treatment in primary care. Psychological treatments for depression include cognitive behavioural therapy (CBT), behaviour therapy, interpersonal psychotherapy, problem-solving therapy and counselling. However, such treatments, which involve one-to-one therapy with a mental health professional over extended periods of time, are resource intensive. Consequently, less intensive therapies and innovative delivery formats, such as group-based work, have been developed. Less resource-intensive therapies include a variety of psychological treatments in which there is no, or only low-level, therapist involvement, for example computerised CBT, guided self-help and structured group physical activity. Such interventions have been termed 'low intensity', although there is no agreed definition of a low-intensity psychological intervention.

It is important to develop interventions and services not only to reduce depressive symptoms and restore functioning, but also to enable people to self-manage their problems and prevent relapse and recurrence of episodes of major depression. Although the effectiveness of low-intensity interventions has been extensively evaluated to treat primary symptoms of psychological difficulties, there has been substantially less research examining the use of these interventions as a relapse prevention strategy.

Objectives

The aim of this project was to systematically review the clinical effectiveness and cost-effectiveness of low-intensity psychological or psychosocial interventions to prevent relapse or recurrence in patients with depression. As the broader definition of ‘low-intensity’ psychological intervention is somewhat contested, and the resources of the review were limited, the review was conducted in two parts:

(a) a systematic review of all evaluations of 'low-intensity' interventions that were delivered by para-professionals, peer supporters or psychological well-being practitioners as defined by the Improving Access to Psychological Therapies programme

(b) a scoping review of relevant evaluations of interventions involving qualified mental health professionals (e.g. psychiatrists, clinical psychologists, cognitive behavioural therapists) involving < 6 hours of contact per patient.
Methods

Comprehensive literature searches were developed to systematically identify relevant studies. For the clinical effectiveness review, eight databases were searched from inception until September 2010 (including MEDLINE, MEDLINE In-Process & Other Non-Indexed Citations, PsycINFO, EMBASE, The Cochrane Library); the searches were restricted to studies published after 1950 and no language restrictions or study design filters were applied. A range of internet resources were searched or browsed to identify guidelines on the treatment of depression. The bibliographies of relevant reviews and guidelines and included studies were scrutinised. For the cost-effectiveness review, terms were added to the strategy to limit retrieval to economic studies, and additional economic databases searched (EconLit, NHS Economic Evaluations Database, IDEAS).

For the clinical effectiveness review, studies from any country and reported in any language were eligible for inclusion provided that they met the following inclusion criteria:

- **Population**: adults or adolescents who had received treatment for depression; studies of participants with bipolar disorder were excluded, as were studies of children.
- **Intervention**
  - Part A – low-intensity interventions, specifically any unsupported psychological/psychosocial interventions or any supported interventions that did not involve highly qualified mental health professionals. Inclusion was not restricted by length of treatment, number of sessions or mode of delivery.
  - Part B – interventions involving qualified mental health professionals, which involved <6 hours of contact per patient (for group treatment, average contact estimates per patient were calculated).
- **Comparator**: any comparator, including no treatment, placebo, psychological or pharmacological interventions.
- **Outcomes**: main outcomes related to relapse or recurrence, other relevant outcomes such as social function and quality-of-life (QoL) measures were recorded where reported.
- **Study design**: randomised, quasi-randomised and non-randomised studies with concurrent control patients.

For the cost-effectiveness review, in addition to the above criteria, only full economic evaluations that compared two or more treatment options and considered both costs and consequences were included.

Two reviewers independently screened titles and abstracts; data were extracted independently by one reviewer using a standardised data extraction form and checked by another. Discrepancies were resolved by consensus, with involvement of a third reviewer when necessary. Quality assessment was undertaken using published checklists.

Results

For the clinical effectiveness review, a total of 9112 unique records were identified from the searches and 129 articles were ordered for assessment. No studies met the main part A inclusion criteria; 17 studies (14 completed, three ongoing), reported in 27 publications, met the part B inclusion criteria. These studies were clinically and methodologically diverse, and reported differing degrees of efficacy for the evaluated interventions. One study was felt to be of potential
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relevance to the main focus of the project – a randomised controlled trial (RCT) that evaluated a collaborative care-type programme, specifically aimed at prevention of depressive relapse in high-risk patients in a US primary care setting. This study, which involved providing patients with face-to-face, telephone and postal contact with trained ‘depression specialists’, reported no difference between patients receiving the intervention and those receiving usual care in terms of relapse of depression over 12 months.

For the cost-effectiveness review, a total of 466 unique records were identified from the searches and 23 articles were ordered for assessment. No studies met the part A inclusion criteria, but two studies met the criteria for part B. One of these was an economic evaluation of the same study, identified as being potentially relevant to the main focus of the project in the clinical effectiveness review. This study found that the intervention may be a cost-effective use of resources when compared with usual care; however, it was unclear how valid these estimates were for the NHS. The other study was a cost-effectiveness analysis of a trial of mindfulness-based cognitive therapy (MBCT) in a primary care setting, and presented inconclusive and highly uncertain results.

Discussion

This is currently the only systematic review of the literature on the clinical effectiveness and cost-effectiveness of low-intensity interventions for the prevention of relapse or recurrence of depression. This review also incorporated a scoping exercise covering evaluations of brief, high-intensity therapies for the prevention of relapse or recurrence typically delivered by clinical psychologists, CBT therapists, and other qualified mental health professionals. There is a need for further primary research on the effectiveness of low-intensity interventions for the prevention of relapse or recurrence of depression.

The limited available research has shown that RCTs are feasible, and any future RCTs should:

■ be conducted in a UK primary care setting
■ consider the entire patient pathway
■ include adult participants in remission or recovery from depression, and collect relevant data at baseline, including number of previous episodes of depression
■ evaluate the quality of the intervention and consistency of delivery across practitioners, if supported
■ be long enough to capture the effect on relapse/recovery
■ measure the occurrence of relapse or recurrence using established methods such as the Structured Clinical Interview for DSM Disorders, and measure functional outcomes as well as symptoms
■ collect data on QoL using a generic instrument such as the European Quality of Life-5 Dimensions (EQ-5D).

Recent clinical guidelines published by the Scottish Intercollegiate Guidelines Network (SIGN) suggest that MBCT in a group setting may be considered as a treatment option to reduce relapse in patients with depression who have had three or more episodes (SIGN. Non-pharmaceutical management of depression in adults. A national clinical guideline. Edinburgh: SIGN; 2010). This recommendation was based on a systematic review performed in 2007 (Coelho HF, Canter PH, Ernst E. Mindfulness-based cognitive therapy: evaluating current evidence and informing future research. J Consult Clin Psychol 2007;75:1000–5). The current scoping review identified three further RCTs of group-based MBCT not included in the 2007 review, two of which are UK-based and currently ongoing [Kuyken W. Preventing depressive relapse in NHS practice through mindfulness-based cognitive therapy (MBCT). The National Institute for Health Research Health
Technology Assessment Programme; 2010. URL: www.hta.ac.uk/1924 (cited 17 November 2010); Williams JMG, Russell IT, Crane C, Russell D, Whitaker CJ, Duggan DS, et al. Staying well after depression: trial design and protocol. BMC Psychiatry 2010;10:23]. An updated systematic review of group-based MBCT on completion of these trials may be of value. Any such systematic review should investigate any potential impact of the duration and intensity of the intervention on the relapse and recurrence of depression.

Conclusions

There is inadequate evidence to determine the clinical effectiveness or cost-effectiveness of low-intensity interventions for the prevention of relapse or recurrence of depression. A scoping review of brief high-intensity therapies indicates that some approaches (e.g. MBCT in a group setting) have shown promise in some studies, but findings have not been consistent.

There is a need for further primary research, and careful consideration should be given to the scope of such research to inform this issue. It is important to evaluate the broader patient pathway accounting for the heterogeneous patient groups of interest.

Future RCTs should be conducted in a UK primary care setting and include adult participants in remission or recovery from depression. They should evaluate the quality of the intervention and consistency of delivery across practitioners where appropriate. The occurrence of relapse or recurrence should be measured using established methods, and functional outcomes as well as symptoms should be measured; data on QoL using a generic instrument, such as the EQ-5D, should be collected.

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Publication

The Health Technology Assessment (HTA) programme, part of the National Institute for Health Research (NIHR), was set up in 1993. It produces high-quality research information on the effectiveness, costs and broader impact of health technologies for those who use, manage and provide care in the NHS. ‘Health technologies’ are broadly defined as all interventions used to promote health, prevent and treat disease, and improve rehabilitation and long-term care.

The research findings from the HTA programme directly influence decision-making bodies such as the National Institute for Health and Clinical Excellence (NICE) and the National Screening Committee (NSC). HTA findings also help to improve the quality of clinical practice in the NHS indirectly in that they form a key component of the ‘National Knowledge Service’.

The HTA programme is needs led in that it fills gaps in the evidence needed by the NHS. There are three routes to the start of projects.

First is the commissioned route. Suggestions for research are actively sought from people working in the NHS, from the public and consumer groups and from professional bodies such as royal colleges and NHS trusts. These suggestions are carefully prioritised by panels of independent experts (including NHS service users). The HTA programme then commissions the research by competitive tender.

Second, the HTA programme provides grants for clinical trials for researchers who identify research questions. These are assessed for importance to patients and the NHS, and scientific rigour.

Third, through its Technology Assessment Report (TAR) call-off contract, the HTA programme commissions bespoke reports, principally for NICE, but also for other policy-makers. TARs bring together evidence on the value of specific technologies.

Some HTA research projects, including TARs, may take only months, others need several years. They can cost from as little as £40,000 to over £1 million, and may involve synthesising existing evidence, undertaking a trial, or other research collecting new data to answer a research problem.

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Reports are published in the HTA journal series if (1) they have resulted from work for the HTA programme, and (2) they are of a sufficiently high scientific quality as assessed by the referees and editors.

Reviews in *Health Technology Assessment* are termed ‘systematic’ when the account of the search, appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

The research reported in this issue of the journal was commissioned by the HTA programme as project number 09/67/01. The contractual start date was in June 2010. The draft report began editorial review in May 2011 and was accepted for publication in December 2011. As the funder, by devising a commissioning brief, the HTA programme specified the research question and study design. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors’ report and would like to thank the referees for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

The views expressed in this publication are those of the authors and not necessarily those of the HTA programme or the Department of Health.

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