Cognitive behaviour therapy for adults with depression: an overview of practical application

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Abstract

The practical application of individual cognitive behaviour therapy (CBT) as a recommended, firstline, evidence-based, therapeutic intervention for adults with depression is considered and described in this paper. Some of the contemporary evidence supporting the provision of CBT for depression, and the characteristic principles, features, and care processes involved in providing this highly-collaborative, formulation-driven, recovery-focused approach are highlighted, with reference to short illustrative examples. As shown, practical application involves a structured and detailed assessment that is used in collaboratively developing a formulation as the basis for treatment planning and intervention. Central to this therapeutic approach, formulation leads to the careful selection and tailoring of specific cognitive and behavioural strategies, several of which are briefly outlined, with suggestions for accessing practical resources. In deciding whether or not to offer this intervention, a series of suitability factors should be considered, in addition to the availability of a well-trained and supervised therapist/practitioner.

Introduction

A well-established and recommended treatment for depression, CBT is now offered in a variety of forms: guided self-help based upon CBT principles, computerised/web-based CBT, and group CBT as options for mild-to-moderate depression, and individual CBT as part of a combination approach for moderate-to-severe depression (1). The intensity and form of delivery of this increasingly accessible psychological approach requires careful consideration and a tailoring of the intervention to the individual's preference, learning style, and complexity of specific needs (1).

In this short paper, the practical applications of individual CBT as a first-line intervention for adults with depression, as well as its key features and core components, are described and considered (1). Brief examples from practice are provided in illustrating key aspects of the approach.

Defining the intervention

CBT for depression is a structured, formulation-driven, psychological intervention that focuses on the inter-relationship between thinking (cognitive), feeling and behaviour (behavioural) as targets for change (2, 3). Cognitive theory and a clinical cognitive model are used as a way to understand the experience and maintenance of depression (2), forming the basis for intervention. Positive change in thinking, mood and behaviour is achieved through the practice of a series of specific cognitive and behavioural strategies (3, 4). As an approach to reducing distress, enhancing coping, promoting positive behavioural change, solving problems and improving functioning, CBT may be viewed as a recovery-focused approach.

An evidence-based intervention

As one of the most studied psychotherapeutic approaches (5), CBT has been shown to be as effective as antidepressants in treating mild-to-moderate depression (1, 6, 7). In a recent meta-analysis of 115 studies comparing CBT with other psychotherapies (e.g. supportive therapy, behavioural activation, psychodynamic psychotherapy, interpersonal therapy), pharmacotherapy, or control conditions (e.g. waiting list, placebo) for adults with depression, CBT was shown to be an efficacious treatment, superior to all control groups and equivalent to pharmacotherapy and other forms of psychotherapy, with a combination of CBT and pharmacotherapy being significantly more effective than pharmacotherapy alone (7). Though most of the included studies focused on adults with major depressive disorder receiving community-based care, with most offering intervention in accordance with Beck's manual (2)

over a course of 8 - 16 sessions, it is worth noting the limitations of this meta-analysis: a broad definition of CBT was applied; the study focused only upon the short-term effects of CBT using symptom measures; the quality of many of the included studies was regarded as low; comparisons with some of the other therapies were based on only a small number of studies; and the authors noted publication bias (7).

In considering whether CBT has a long-term and protective effect, lower relapse rates have been reported for those receiving CBT for depression as compared with pharmacotherapy at one-year and two-year follow-up intervals (8, 9), and significantly fewer residual symptoms and lower recurrence rates at four-year follow-up have been reported for those receiving CBT for residual symptoms as compared with usual care (10, 11). In the more recent CoBalT trial, 12 - 18 sessions of high intensity CBT was shown to be an effective treatment for primary-care-based patients who had not responded to medication, reducing symptoms of depression and improving quality of life over 12 months (12), demonstrating the clinical and cost effectiveness of CBT as an adjunct to usual care over the longer term (13). At long-term follow-up (average 40 months), compared to usual care only, those who received CBT self-reported significantly lower symptoms, and showed greater response and remission rates and improvement in mental health (13).

Adopting a structured approach

It is perhaps best to think of the practitioner or therapist as a guide, positively engaging and actively involving the client throughout the change process. As key features of the approach, this will involve the following: conducting a systematic assessment; the collaborative development of a formulation; the negotiation of a focus for intervention; promoting the client's involvement, learning and self-management through a time-limited series of structured therapeutic sessions and between-session practice tasks; and outcome measurement (3, 14). Sessions are structured in the sense that they involve: a brief review of what has occurred during the intervening period since the previous session; collaborative agenda-setting; a review of between-session practice tasks; education about/discussion of agreed agenda items; the negotiation of related practice tasks to be undertaken before the next session; and the eliciting of feedback (15, 16).

From assessment to formulation

Within CBT, a structured and detailed assessment is conducted to gather information which is used to develop a cognitive behavioural formulation with the individual in understanding their experiences, problems and needs as the basis for planning intervention, as summarised in figure 1.

As described in detail elsewhere (3, 15-17), assessment may be viewed as a flexible, educational, "collaborative process of joint discovery", that involves conducting a functional analysis, specifically considering the function of thinking and behaviour (18).

Assessment will involve gaining a detailed description of the individual's presenting experiences/difficulties and will focus upon exploring the development and onset of difficulties. As part of this process, it is helpful to invite the client to talk through recent specific experiences, using questions and active listening skills to clarify the finer detail of difficult situations and the impact on the individual's thoughts, feelings, behaviours and any related bodily sensations (15, 19). This offers an opportunity to begin applying the cognitive model, as illustrated in figure 2.

Relevant influencing and maintaining factors that are commonly experienced in depression will be considered as a key feature of assessment, such as: negative beliefs about self, others and the future (the cognitive triad, as a cornerstone of depression (2)); negative predictions; withdrawal and avoidance behaviour; and reduced activity.

Baseline self-monitoring and further assessment will be undertaken using selected standardised assessment tools and person-specific measures and scaling questions, to clarify the nature and severity of the individual's experiences.

Figure 1: Summarising the assessment process

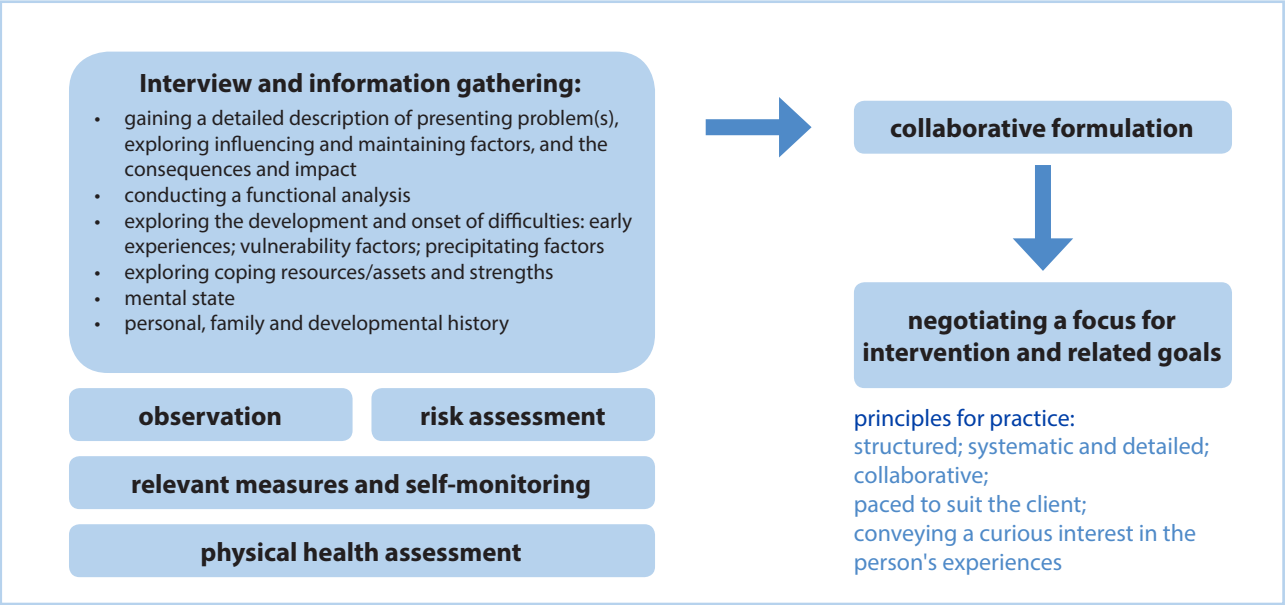
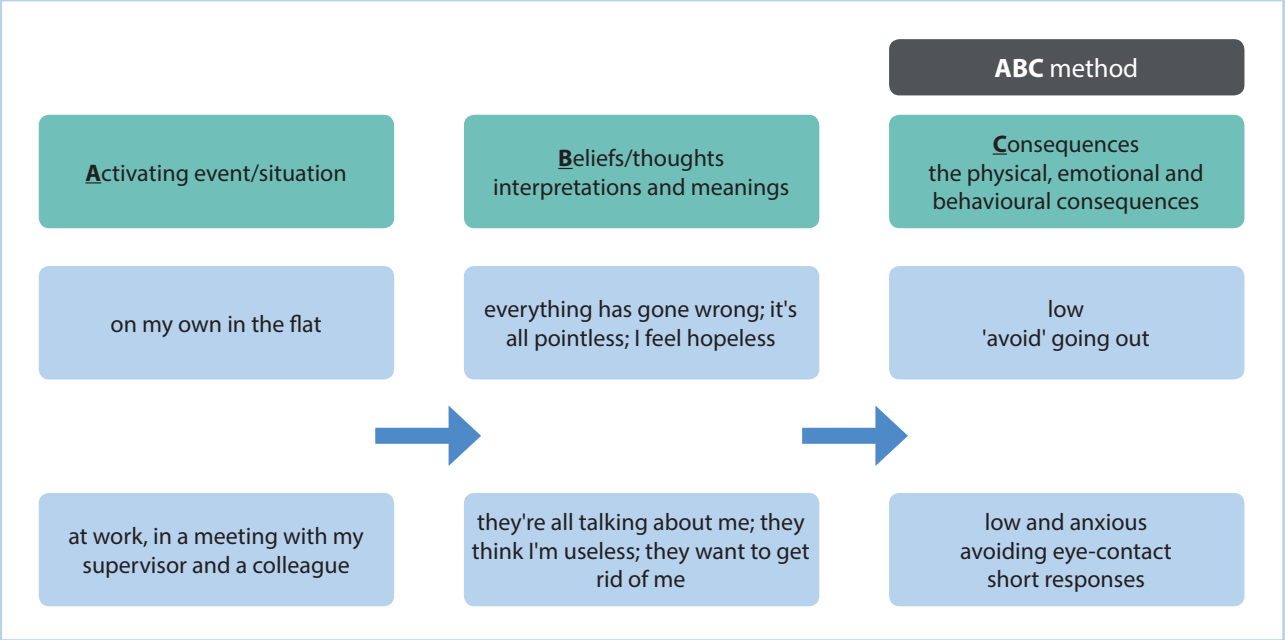


Figure 2: ABC method (useful for considering current/recent experiences, and introducing the client to the cognitive model)

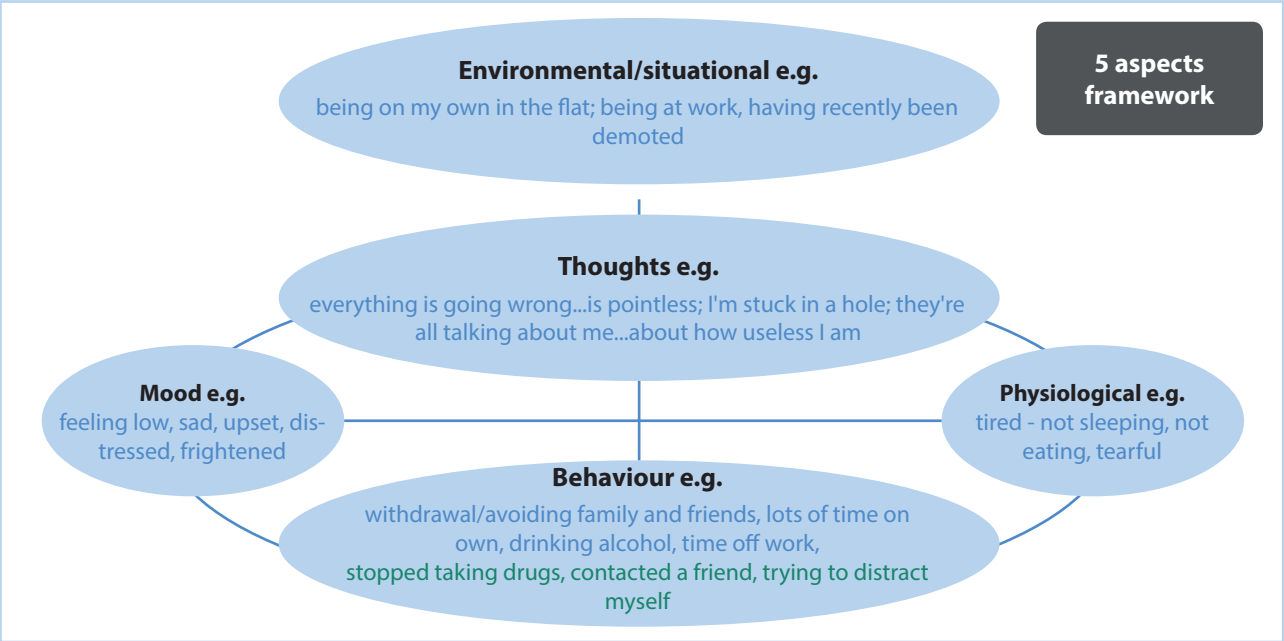


A fundamental aspect of CBT, collaborative formulation involves the use of a cognitive-behavioural framework in forming a shared understanding of the development and maintenance of the individual's presenting issues, which can be undertaken at different levels (20):

- introducing the individual to the cognitive model (activating event, beliefs/thoughts, consequences)
- use of a problem maintenance framework, such as the well-known five aspects model (19)
- the development of a historical/longitudinal formulation that involves identifying how predisposing, precipitating and protective factors help to explain the development of key issues (20)

For the purposes of illustration, consider the following excerpts from a problem-maintenance and developmental formulation that were developed with Suzanne, a 23-year-old single woman presenting as distressed, low in mood and withdrawn (figures 3 and 4).

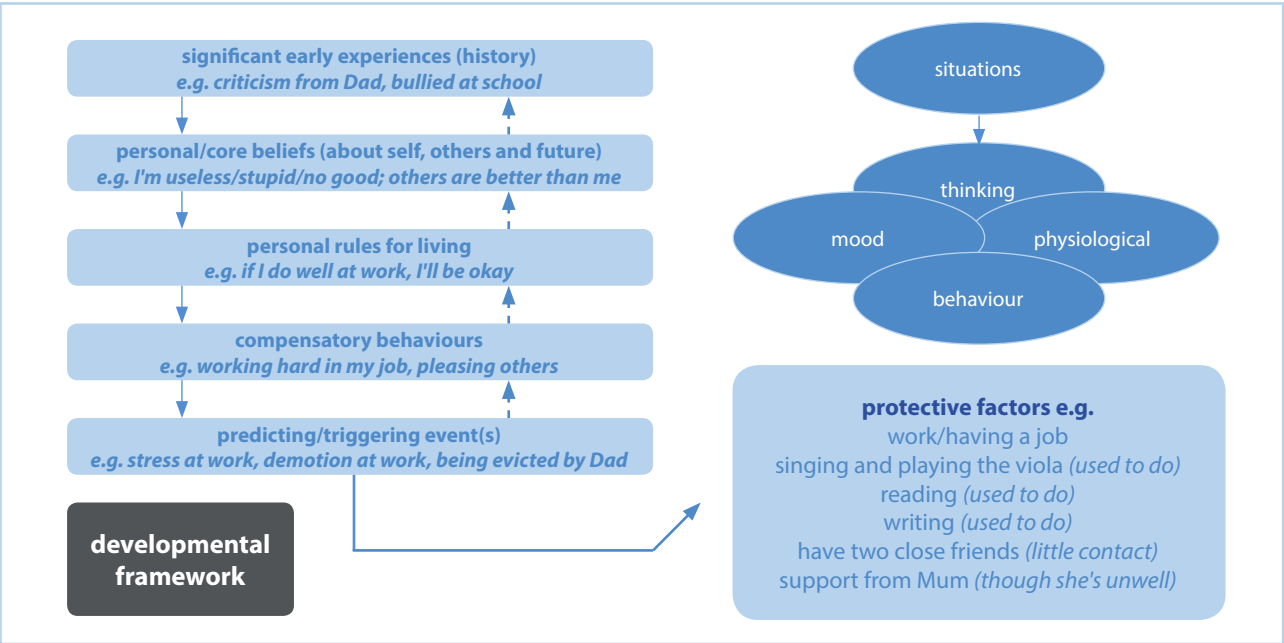
Figure 3: Problem-maintenance formulation (useful for considering life situations, recent experiences and maintaining/perpetuating factors, and further applying the cognitive model) (based on Greenberger and Padesky (19))



As shown, the formulation process should involve a consideration of the client's personal and social resources, positive attributes, circumstances and strengths to inform the intervention strategy (20).

Whichever approach to formulation is taken, it is important to achieve a balance between complexity and simplicity, ensuring understanding and relevance (21), frequently reviewing and refining the formulation through practice and supervision (22).

Figure 4: Developmental formulation (useful for considering the development and onset of key issues) (based on Dudley and Kukyen (20))



Cognitive behavioural intervention

Though intervention begins as part of an educational assessment phase, formulation will inform the focus, planning and sequencing of practical intervention. The formulation allows the identification and prioritising of a specific problem list, and negotiation of a focus/target for intervention. Once a focus and related personal goal(s) have been agreed, a rationale can be developed for the use of practical

cognitive and behavioural intervention strategies likely to address the selected issue(s), ensuring frequent opportunities for the individual's active engagement, application of strategies, review and learning (3, 15).

Considering Suzanne (figures 3 and 4), her problem list included a number of inter-related issues e.g. unhelpful thought patterns, low self-confidence and low self-esteem, low mood and distress, avoidance and withdrawal, lack of energy and difficulties in gaining sleep, not eating, and alcohol misuse. It was also important to consider her positive factors (figure 4), even if several of these related to previous, rather than active, interests.

CBT for depression involves the careful selection and tailoring of cognitive and behavioural strategies, which typically include education about depression and its management, activity and mood monitoring, forms of behavioural activation, monitoring and testing thoughts/beliefs, self-esteem building, behavioural experiments, structured problem solving, developing coping strategies (e.g. distraction) and relapse prevention planning; a summary of some of these strategies is provided in table 1.

Table 1: Considering specific interventions

Education	
As an initial strategy which commences within the assessment and formulation phase, this involves explaining the main features of depression and introducing the client to the cognitive behavioural model as a way of understanding their experience of depression and ways of achieving change. For an example of supporting information for the client, see Greenberger and Padesky (19).	
Activity scheduling	
Rationale: characterised by low energy levels, a loss of motivation and interest, unhelpful thoughts and lowered self-esteem, depression often leads to reduced activity. Exercise and stimulating physical activity enhances mood.	Helpful in the early stages of intervention, this typically involves forming a daily plan of activities, self-monitoring of activity, and may include the rating of achievement (or mastery) and enjoyment (pleasure) before and after activities. A variety of practical resources are available to support the use of this strategy (14, 15, 19, 23). It is important to involve the client in: planning activities that are realistic and achievable; breaking large tasks down into smaller steps; pacing activity well, and gradually building up activity levels (graded task assignment); planning enjoyable activities/previous interests; actively self-monitoring progress; and identifying patterns and reviewing the benefits.
Monitoring and evaluating unhelpful thoughts	
Rationale: depression is maintained by unhelpful patterns of thinking, which are directly influenced by deep seated personal beliefs that are activated by a precipitating/stressful event, as briefly illustrated in figure 4. Helping the client to recognise unhelpful thinking patterns and to evaluate and respond to unhelpful thoughts will promote positive change	Using the well-known thought monitoring record, this ideographic, reflective tool involves a two-stage process of assisting the client to: identify negative automatic thoughts, recognising 'hot' thoughts (those associated with intense affect) and unhelpful thinking patterns; and evaluate and respond to negative thoughts and form realistic alternative thoughts. This typically involves the use of an evidential technique of weighing up the evidence for and against the negative 'hot' thought. A difficult skill to develop for many, this requires considerable practice and is aided through the use of several related strategies, for example: decentring (taking a step back from the thought); using the motivational strategy of weighing up the pros and cons of continuing to hold a particular thought;

	understanding and recognising cognitive biases/themes; gaining a realistic perspective by reversing roles; and reviewing previous experiences (15, 19, 25). The role of the practitioner is to guide the client's own discovery, which is aided by conveying curiosity and adopting a Socratic style of asking questions, reflecting and summarising. Several practical resources are available to aid the use of this strategy (15, 19, 23, 25).
Example: through the use of the thought record, Suzanne (figures 3 and 4) recognised several unhelpful thinking patterns such as discounting positives, mind reading, negative predictions, attaching negative labels to herself and personalising, as characteristic maintaining factors in depression. Beck (3) and Kennerley et al. (15) provide a good description of unhelpful thinking patterns/cognitive biases.	
Behavioural experiments	
Rationale: the impact of monitoring and responding to thoughts may be limited, and this can be strengthened by testing thoughts through carefully planned behavioural experiments.	Specifically designed to help the client test the validity of a belief/thought, this involves working through a series of key stages, based upon Kolb's experential learning cycle (26): • *preparing* by clarifying the unhelpful thought to be tested and identifying a more helpful alternative thought • *planning* a meaningful test to explore which thought is most accurate, which will involve fostering a sense of curiosity, making predictions about what may happen and encouraging detailed planning • *experiencing*, or actually doing it • *observing* what actually happened, which will involve self-monitoring and rating thoughts and feelings before, during and after the test, and • *reflecting* on the experiment, which will involve discussing the results of the test and ways of putting any new learning into practice. Designing effective behavioural experiments is a skill that requires considerable practice, for which some invaluable resources and self-monitoring tools are available (19, 26).
Structured problem solving	
Rationale: depression may have been precipitated by, or be maintained by, a practical problem/issue which the individual has not addressed, perhaps as a consequence of lacking skills in problem solving. This can be addressed by developing skills in structured problem solving.	This involves educating the client in the use of a structured approach to addressing/solving one or more short-to-medium term practical problems. This typically involves guiding the client through the application of a series of steps: • clarifying/defining the problem • establishing a goal • generating and weighing up potential solutions • selecting a preferred solution, which may involve combining more than one solution

	• establishing and carrying out a specific step-by-step action plan, and • reviewing and evaluating the solution. The role of the practioner is to explain and guide the client through the steps, providing encouragement and praise for their effort, for which it can be useful to introduce a guided workbook or worksheet (27).
Outcome monitoring	
Rationale: monitoring outcomes assists exploration of the problem and treatment planning, raises the client's awareness of change/progress, leads to an understanding of helpful strategies, and prompts timely review. Best considered as an adjunct to (re)assessment and review, it is recommended to use relevant outcome measures (1).	In monitoring the outcomes of CBT for depression, it will be helpful to consider selecting a combination of person-specific measures (e.g. problem and goal attainment, scaling tools/questions, activity schedules and thought records) and standardised assessment/ outcome and quality of life measures (19, 24). Relevant examples of standardised measures include clarifying assessments such as the self-report PHQ-9 (28) and Beck Depression Inventory Version 2 (BDI-II) (29), and outcome measures such as the Outcome Questionnaire-45.2 (OQ-45.2) (30). In selecting tools, it is important to consider their appropriateness, availability, whether any resources are needed, ease of use, familiarity, reputation, and the consistency, validity and sensitivity of the measure.
Example: through repeated outcome-orientated assessment, Suzanne showed markedly reduced scores on the OQ-45.2 and BDI-II, indicating improvement - these outcomes were openly discussed with her as part of planned sessions.	

More recently, this repertoire of interventions has been complemented by the use of Behavioural Activation (BA), mindfulness and compassion-focused approaches. BA is a contemporary, 'brief structured intervention for depression that aims to activate clients in specific ways that will increase rewarding experiences', specifically addressing escape and avoidance behaviours (31). Facilitating change in thinking and feeling by changing behaviour, sessions are action orientated and include the development of alternative coping strategies and problem-solving, with a variety of between-session practice assignments that includes activity scheduling and graded task assignment. NICE (1) recommends the use of BA as a standalone or combination treatment for depression: 16 - 20 sessions over a 3 - 4 month period, in addition to follow-up sessions.

Conclusion

A highly collaborative, formulation-driven, practical approach, recommended as an evidence-based intervention for depression (1), CBT has much to offer in assisting the individual's recovery. However, the critical ingredient for success may as much depend upon the practitioner's ability to establish a collaborative therapeutic relationship as any technical aspects of therapy. Furthermore, though many people clearly gain benefit from CBT, it is not an approach that will suit everyone. It is suggested that those most likely to gain benefit are those who are able to: engage within a collaborative relationship; work towards and understand a shared 'cognitive-behavioural' formulation; focus on key issues and identify personal goals for intervention; access their thoughts and reflect upon their experiences; actively engage in activities that test their thoughts/behaviour; practice new ways of coping; and have some optimism about the outcome of the intervention and likely change (14, 15, 18, 32).

Although many practitioners may establish a cognitive-behavioural formulation and use the strategies/ techniques outlined within this paper, it is clearly important that they have undertaken training and are engaging in clinical supervision, which is viewed as fundamental in enabling practitioners to engage

within reflective practice, access support, and in promoting their development of effective clinical skills and competence (1, 33, 34). It is recommended that supervision be based on the cognitive-behavioural model, thus reinforcing the structure, style and key practical aspects of the approach, and to achieve a balance between case discussion and the practice of therapeutic techniques, including opportunities for co-working, and audio/video/live supervision (1, 33, 34).

Recommendation

For moderate-to-severe depression, the National Institute for Health and Care Excellence (NICE) recommends a combination of antidepressant medication with a high-intensity psychological intervention, such as 16-20 sessions of individual CBT over 3-4 months, with additional follow-up. If there is a significant risk of relapse, it is recommended to offer individual CBT or mindfulness-based cognitive therapy. Importantly, it is recommended that any such intervention is delivered by a trained and competent practitioner, with their quality of practice being assured through regular high-quality clinical supervision (1).

Please note, NICE are currently in the process of updating their clinical guidelines.

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