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Using Implementation Intentions to Prevent Relapse after Psychological Treatment for Depression – the SMArT Intervention

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Background: It is recognized that a significant proportion of people with depression are prone to relapse, even after successful treatment, and that self-management interventions should be developed and provided. There is evidence that implementation intentions (IMPS) can be successfully applied to health-related behaviours but their application to self-management of mental health problems has been limited. **Aims:** This paper describes the design and initial evaluation of a Self-Management After Therapy (SMArT) intervention, which incorporated IMPS and followed psychological therapy for depression. We sought to assess the feasibility and acceptability of SMArT. **Method:** The SMArT intervention was designed with reference to the MRC guidance on developing and evaluating complex interventions and co-designed with and implemented in a UK Improving Access to Psychological Therapies (IAPT) service. Eleven patients who were in remission following treatment for depression received the SMArT intervention, provided by Psychological Wellbeing Practitioners (PWPs). The evaluation used routine IAPT outcome measures at each session, feedback from patients and PWPs, and analysis of the type of IMPS identified and their fidelity with the model. Six patients provided brief feedback about the intervention to an independent researcher. **Results:** Feedback from patients and PWPs suggested that the intervention was feasible, acceptable and could potentially help patients to stay well after therapy. Patients confirmed the value of setting their own goals in the form of IMPS, receiving support from PWPs and in some cases from partners, friends and family members. **Conclusions:** Implementation intentions are a promising approach to support the self-management of depression.

Keywords: depression, self-management, relapse prevention, implementation intentions

Introduction

Even following successful treatment for depression, the lifetime risk of relapse has been reported as more than 40%, with the risk increasing following repeated episodes (e.g. Solomon et al., 2000). Depression is therefore a long-term or relapsing condition for many people and this has led to a greater emphasis on long-term self-management approaches. Relapse prevention approaches for depression include continuation-phase anti-depressants, cognitive behaviour therapy (CBT)-based booster sessions, and mindfulness interventions. The development and evaluation of low cost, brief interventions that support self-management and prevent relapse has been very limited (Rodgers et al., 2012).

This paper describes the development of a new intervention to support self-management and to reduce the likelihood of relapse after therapy for depression. Our approach has been informed by the UK Medical Research Council (MRC) guidance on the development, evaluation and implementation of complex interventions (Craig et al., 2006), which recommends that in the development phase several questions should be considered: is the intervention informed by theory and clearly described?; how does it bring about change?; does it have support from current evidence, preferably a systematic review?; can it be implemented in research and routine practice settings?

Design of the Self-Management After Therapy (SMArT) intervention using implementation intentions

The SMArT intervention was designed as a low-intensity relapse prevention intervention to support self-management of depression, using implementation intentions (IMPS) (Gollwitzer, 1993). There is a weak correspondence between what people intend to do and what they actually

do, so strategies are needed to bridge this 'intention–behaviour' gap. IMPS do this by prompting a person to initiate a goal-directed response when a specified situation is encountered. To form an IMP, an individual makes a plan linking a situation (an external cue such as time, event or place, or an internal cue such as feelings or cognitions) to a response that could be a behaviour, feelings or cognition (Prestwich et al., 2015). This linking process usually involves forming a specific 'if – then' statement. For example, to enable an individual to become more physically active, they could form a plan such as: '*if* I have to go up to my office on the third floor *then* I will take the stairs'. IMPS have been successfully applied to influence a wide range of health-related behaviours.

In the SMArT intervention, patients have a broad goal intention to 'stay well after therapy for depression', and IMPS were developed to help achieve this goal. The level of commitment to goal intentions can be variable (for example in quitting smoking), but we would expect the commitment to the goal of staying well after therapy for depression to be high. In the SMArT intervention, IMPS were identified that built on the therapy and prompted the client to continue to do the things that help them manage their problems. The intervention was designed in collaboration with Psychological Wellbeing Practitioners (PWPs) and was provided to a small group of patients. Feedback was collected on its feasibility and acceptability in helping patients formulate and use IMPS to support self-management for depression after therapy.

Method

Setting

The study was carried out in one Improving Access to Psychological Therapies (IAPT) service in Northern England.

Design

This was a feasibility and acceptability study, following development phase MRC guidelines for complex interventions.

Inclusion criteria

Patients were invited to take part if they had attained remission of symptoms following a psychological intervention for depression, using the criterion of a pre–post treatment change from above to below the clinical cut-off (10) on the Patient Health Questionnaire (PHQ-9). Remission in this study therefore refers to a return to a sub-threshold level of symptoms. All patients also scored below the clinical cut-off (8) for the GAD-7 when invited to take part.

The SMArT intervention

The intervention was provided by one of three PWPs and consisted of four sessions: a face-to face meeting, lasting for up to one hour, within 4 weeks of the end of the acute-phase psychological treatment, followed by three 30-minute telephone follow-up sessions 1 month apart. Patients agreed up to five IMPS at the face-to-face session. The emphasis was to build on the preceding therapy, including relapse prevention plans. IMPS were formed so that they

were personally meaningful to the patient and intended to 'help the person to stay well'. The IMPS were written down in a standard format, with a cue and response clearly identified.

Diary sheets were used to monitor the extent to which participants could carry out the IMPs and any problems encountered. The IMPS and diaries were discussed at each of the telephone support sessions at which progress in carrying out the IMPS was reviewed and support provided to overcome barriers.

Procedure

Patients opted into the intervention. It was explained that all participants would be invited to provide brief feedback to an independent researcher via telephone after the SMArT intervention was completed to refine and improve the intervention.

Measures

Symptom-based outcome measures were completed by the patients at every session: (1) PHQ-9, a measure of depression; and (2) GAD-7, which measures generalized anxiety. The clinical cut-off, indicating clinically significant symptoms, is 10 and above for the PHQ-9 and 8 and above for the GAD-7.

Evaluating and classifying IMPS

The IMPS were collated and classified by author M.L. in terms of type of cue (internal or external) and response (internal, feelings/cognitive process or behaviour). To ensure accuracy, all codes were then checked, including for adequate specificity, by an implementation intentions expert (author A.P.).

Results

Participants

Twenty-two patients were invited to take part, and thirteen opted in and attended the first face-to-face session. Of those, two did not meet eligibility criteria (one had acute symptoms of post-traumatic stress disorder, and one asked for ongoing acute-phase therapy). Eleven patients therefore engaged with the first face-to-face session and agreed IMPS; of these, seven completed all sessions, one dropped out after one session, two dropped out after two sessions, and one dropped out after three sessions. All those who dropped out scored below the clinical cut-off at their last session (see Table 1). Two were male and nine were female, and the average age was 45 years (range 21–63). Seven had accessed individual CBT, two had accessed behavioural activation, four had accessed low intensity CBT, and one had accessed group CBT (two patients had received two previous interventions).

Table 1 shows the PHQ-9 scores for each patient at all time points and the means (with *SD*) for both the PHQ-9 and GAD-7 at each stage. It also shows the percentage below the cut-off on the PHQ-9, indicating remission. All patients scored below the cut-off at discharge from the previous therapy (this was an inclusion criterion). Six out of ten (60%) scored below the cut-off at the first face-to-face session (before the SMArT intervention) and by the final session

Table 1. PHQ-9 scores and remission rates for patients starting the SMArT intervention

Patients	Before therapy	Discharge from therapy	Face-to-face SMArT session	First telephone follow-up	Second telephone follow-up	Third telephone follow-up
1	23	6	9	7		
2	11	9	16	11	14	12
3	12	1	10	2	2	
4	25	6	6	6		
5	19	2	2	1	6	1
6	20	7	9	12	9	7
7	18	3	2			
8	17	8	12	10	9	9
9	15	0	Did not complete PHQ-9	Did not complete PHQ-9	4	1
10	12	2	3	2	3	5
11	20	8	10	4	1	1
PHQ-9 mean (*SD*)	17.5 (4.6)	4.7 (3.2)	7.9 (4.6)	6.1 (4.2)	6 (4.4)	5.1 (4.4)
GAD-7 mean (*SD*)	13.5 (5.4)	4 (1.9)	3.7 (2.8)	3.2 (2.8)	4 (3.8)	3.4 (3)
n attended session	11	11	11	10	8	7
n (%) in remission: <10 on PHQ-9	0 (0%)	11 (100%)	6 (60%)	6 (67%)	7 (88%)	6 (86%)

only one of the patients who completed the intervention scored above the clinical cut-off (they had scored above the cut-off prior to the SMArT intervention).

Implementation intentions

A total of 52 IMPS were agreed by the eleven patients who engaged in the first session (mean = 4.7; range = 3–6). Forty-four (85%) were rated as consistent with the model; 21 (40%) involved internal cues and 31 (60%) external cues. Where the IMPS were not compliant with the model, the trigger cue was not sufficiently specific. An example of an internal cue was: '*if* I start to feel depressed, *then* I will …'. An example of an external cue was: 'every morning after dressing, *then* I will ...'. Forty-two (80%) of the responses were overt behaviours, with five (10%) being cognitive strategies and a further five (10%) being a mix of a cognitive strategy and an overt behaviour.

Qualitative feedback

Six patients who completed the intervention provided brief feedback by telephone. They reported feeling reassured to have further contact with someone after the end of therapy; that the

sessions acted as a bridge from therapy to self-management; that the initial face-to face session was important in establishing the plans; subsequent telephone sessions were acceptable and convenient; and that setting up to five IMPS with the PWP was helpful and feasible. Most found the use of diaries helpful, although one person said there was too much paperwork, especially when they felt down. Some also felt pressure to maintain their plans as they didn't want to 'let down' their PWP. Those who shared their plans with partners, friends or family members found it very helpful. More detailed information on this feedback, including quotations, can be seen in the supplementary report online. The PWPs reported that the intervention aligned very well with their training role, and that it was rewarding to work with patients who were usually functioning well, with a focus on positive coping and maintaining wellbeing.

Discussion

The SMArT intervention is a promising approach to support relapse prevention in depression, and was acceptable to patients and PWPs. The initial face-to-face session helped to establish a collaborative approach, and the follow-up telephone appointments helped patients to focus on and implement their plans. Among the negatives were the pressure of record-keeping and concerns about not achieving the plans. The importance of a person's social network to support implementation of plans was apparent, which is consistent with research into collaborative implementation intentions that encourage the involvement of partners in planning and carrying out IMPS. A limitation of the study was that all the patients interviewed had completed the intervention, so the views were likely to be positively biased.

Although the focus of the intervention was on depression, some of the IMPS related to managing anxiety. There was no attempt to separate out depression-related IMPS from anxiety-related ones. This is consistent with a transdiagnostic approach and although the approach should also be applicable to anxiety problems, this would have to be evaluated with further research.

This was an uncontrolled study, primarily aimed at developing and refining the intervention and involving just eleven patients, so firm conclusions cannot be drawn regarding effectiveness. However, the study did underline the importance of relapse prevention in that almost half of the patients showed a recurrence of case-level depression symptoms before they started the SMArT intervention. This is consistent with a recent study showing high relapse rates in the first 6 months after low-intensity CBT, and that those with residual depression symptoms at the final treatment session were twice as likely to relapse (Ali et al., 2017).

The promising aspects of SMArT are its simplicity, brevity, ease of administration, compatibility with behavioural and cognitive coping skills that patients learn during acute-phase treatments, and compatibility with the skills and roles of PWPs. We conclude that the development and empirical testing of brief, flexible and parsimonious self-management support approaches such as the SMArT intervention is an important area for future research, and that implementation intentions are a promising approach to support the self-management of depression.

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Supplementary material

To view supplementary material for this article, please visit https://doi.org/10.1017/S1352465818000255

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