

SELF-HELP FOR OBSESSIVE-COMPULSIVE DISORDER: HOW MUCH THERAPIST CONTACT IS NECESSARY?

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Summary

Despite the availability of effective psychological and drug treatments for obsessive-compulsive disorder (OCD), many patients remain inadequately treated or untreated. Making effective self-treatment guidance available may increase the number of patients being helped. In this paper we critically review the self-help literature in OCD including bibliotherapy, self-help groups, telecare and computer-aided self-help. We found no randomised controlled trials (RCTs) of bibliotherapy or self-help groups for OCD. Three open and one controlled studies showed the efficacy of brief exposure and ritual prevention (ERP) instructions delivered by a live therapist by phone. A vicarious ERP computer program was effective in a small open study. Interactive computer-aided self-help by ERP (*BTSteps*) was effective in 2 open studies and efficacious in a large multicentre RCT. In a small RCT, compliance and outcome with *BTSteps* was enhanced by brief scheduled support from a clinician. Thus, while many of the routine aspects of therapy can be successfully delegated to a computer, the therapist is not completely redundant. Brief therapist time is needed to motivate patients to start and complete ERP and give brief advice. It is unclear how much therapist input is needed to support cost-effective self-help without impairing efficacy. Effective self-help for OCD can improve many patients who would otherwise remain inadequately treated or untreated. More use of such self-help as the first step in care could save much time of health care staff.

Key words: OCD - Self-Help - Bibliotherapy – Telephone – Computer-Aided Therapy – Internet Therapy – Interactive Voice Response – Telecare – *BTSteps*

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Introduction

Though effective psychological treatment (cognitive behaviour therapy - CBT) and medication have been available for OCD for over 30 years, many sufferers remain untreated or inadequately treated. They commonly take up to 10 years before seeking help (Rasmussen and Tsuang 1984) due to fear of stigma (Simonds and Thorpe 2003) and most sufferers in the community who have an anxiety disorder do not seek help (Bebbington et al. 2000, Goodwin et al. 2002). Those who do seek help face the obstacle of a shortage of suitably trained therapists and long waiting lists.

In CBT for OCD, patients are often accompanied by a therapist during 'exposure' to their real feared situations, and are then asked to practise exposure and ritual prevention (ERP) "homework" regularly between sessions. The usually heavy demand on therapists' time and long waiting lists could be reduced by placing more

emphasis on effective *self*-treatment. In several studies, self-treatment for anxiety and mood disorders was effective when instructed briefly by a clinician (Al-Kubaisy et al. 1992, Park et al. 2001), a book (e.g. Ghosh et al. 1988, Den Boer et al. 2004), or an interactive computer program (e.g. Ghosh et al. 1988, Marks et al. 2004) accessed via a standalone PC or the internet (e.g. Schneider et al. 2005) or the telephone (Osgood-Hynes et al. 1998, Greist et al. 2002). Furthermore, effective self-help cut therapist time and hence cost and can also be more convenient for sufferers guided to do it at home without any need to travel to a clinic (Greist et al. 2002).

This paper critically reviews the available self-help literature in OCD. For a comprehensive review of this topic also see Mataix-Cols and Marks (2006). Here, we focus on the crucial question of whether patients can treat themselves using self-help materials and the extent to which a therapist is necessary.

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Bibliotherapy and self-help groups

The efficacy of bibliotherapy has been well established for several anxiety and mood disorders (see a recent meta-analysis by Den Boer et al. 2004) but in OCD the evidence is limited. In a small open trial (Fritzler et al. 1997), 9 OCD patients improved significantly after using a self-help book plus 5 face-to-face sessions of up to 60 min. with a clinician over 12 weeks; 3 of the 9 patients were also judged to be clinically improved. We could find no other bibliotherapy trials for OCD. While multiple self-help groups for OCD exist and some were described in the literature (Black and Blum 1992, Broatch 1996), we could find no controlled trials testing their efficacy. Due to the paucity of research, the efficacy of self-help groups for emotional disorders in general is unclear (Den Boer et al. 2004). How much therapist input is needed to maximize the efficacy of these self-help approaches is not yet known.

Brief ERP instructions given by a therapist on the telephone

In a pilot study of 4 patients, a single 45-minute face-to-face session followed by eight 15-minute weekly phone therapy sessions and a final 30-minute face-to-face session with the clinician yielded clinically significant improvement in 3 of them (Lovell et al. 2000). Including assessment, clinician time per patient was less than 4 hours. An RCT (randomized controlled trial) comparing this intervention with traditional face-to-face ERP has recently been published (Lovell et al. 2006). Seventy-two patients were randomized to a) 10 1-hour face-to-face sessions with a therapist or b) one face-to-face session followed by 8 scheduled weekly telephone sessions of up to 30 minutes in length and a final 1-hour face-to-face session. The results showed that both interventions were equally effective at post-treatment and up to 6-month follow-up and patients reported similarly high levels of satisfaction. The treatment effect sizes of both groups were comparable to if not better than those of previous CBT trials for OCD and attrition was lower than in most previous studies (only 1 patient from the telephone arm failed to complete the trial). Crucially, the telephone treatment arm yielded a 40% saving in therapist time.

In 2 further open trials (Taylor et al. 2003), 33 non-depressed patients received 12 weekly 45-minute telephone-administered ERP sessions supplemented with a self-help book. Twenty-six patients completed treatment and dropouts did not differ from completers at pre-treatment. Overall, patients improved significantly on several measures and maintained their gains at 12-month follow-up. The mean pre/post-treatment effect size d across measures was 1.1 and 45% of patients no longer met criteria for OCD at the end of treatment. These results are comparable to those of face-to-face ERP.

Computer-aided self-help for OCD

Computer systems are being used increasingly to aid the assessment and self-treatment of mental health

problems (Marks 1999). The structured, evidence-based techniques of CBT lend themselves well to computerisation for the treatment of a wide variety of problems such as phobias (Ghosh et al. 1988, Marks et al. 2004, Schneider et al. 2005), depression (Osgood-Hynes et al. 1998), alcohol reduction (Hester and Delaney, 1997), and smoking cessation (Schneider et al. 1990). Computers might effectively help certain sufferers who would otherwise remain untreated and free clinicians to help more patients than is possible without computer help.

OC-CHECK

The first report of computer-aided CBT for OCD was by Baer et al. (1987). Their program, called *OC-CHECK*, was developed to enhance compliance with exposure therapy and record-keeping for a woman aged 58 with a 37-year history of aggressive obsessions and checking rituals. She improved only slightly during 3 years of face-to-face ERP and medication. The patient then used two portable computers in sequence – first a laptop at home to familiarise herself with the procedure, and then a palmtop computer she carried whenever she left home to use each time she had an urge to ritualise. *OC-CHECK* asked her to resist the urge to check for 3 minutes while watching the time ticking away on the computer and being told that nothing bad would happen. The program stored the date, time, intensity and frequency of checking rituals per day. She reduced her checking markedly and maintained gains for up to 1 year. However, she then stopped using the palmtop outside home (due to embarrassment when using it in public), after which her rituals returned to baseline levels.

Computer-aided vicarious exposure (CAVE)

In Australia, Ken Kirkby and colleagues developed *CAVE*, a computer program (Clark et al. 1998) that uses interactive animations to depict vicarious exposure with ritual prevention (ERP). *CAVE* teaches patients the principles of ERP to encourage them to begin self-treatment, starting by asking them to imagine that they are a person shown on the screen who has contamination obsessions and washing rituals. *CAVE* then explains the screen person's OCD problem and the principles of ERP, and asks the patient to guide that screen person through exposure to dirt by planting a daffodil bulb in a garden. The patient can use the mouse to direct the screen person to touch dirt in a garden on the screen. The screen person can also be directed inside the house to a sink where that person can wash hands or refrain from so doing. An on-screen anxiety "thermometer" feeds back the current anxiety of the screen person which rises when its hands are dirty. Patients score points when they direct the screen person to dirty its hands without washing afterwards. As participants continue vicarious exposure to dirt, points accumulate towards a target habituation score, and the figure's anxiety is shown to decline, simulating habituation.

CAVE's efficacy was tested in a small pilot study (Clark et al. 1998, Kirkby et al. 2000) of 13 OCD

patients - 7 mainly washers and 6 mainly checkers. They used the vicarious exposure program for 3 weekly 45-minute sessions. In the OCD group as a whole, the Padua Inventory, Beck Depression Inventory and Behavioural Activation Test fell significantly and the Y-BOCS tended to reduce. Washers tended to improve more than checkers, unsurprisingly as *CAVE* was devised for washers. The more vicarious ERP that patients did in session 1, the more they improved at post-treatment, so the authors concluded that more sessions were needed.

BT(Behaviour Therapy)Steps

BT-Steps is an interactive computer program accessed remotely from anywhere via a touch-tone telephone using interactive voice response (IVR) technology. Patients are given a workbook, an ID number and a personal password to obtain toll-free 24/7 phone-IVR access at home. *BT-Steps* guides users through self-ERP in 9 steps much as a therapist does. Steps 1-4 guide self-assessment for OCD and Steps 5-9 guide patients on how to perform effective ERP. In brief, *BT-Steps* helps patients work out their OCD problem in enough detail to plan and carry out ERP day by day, complete daily diaries on ERP homework sessions, co-opt a friend or relative as co-therapist, rate progress, and prevent relapse. *BT-Steps* will shortly be available on the internet under the name *OCFighter*.

After successful piloting in two open trials in the UK and the USA (Greist et al. 1998, Bachofen et al. 1999, Nakagawa et al. 2000), the clinical efficacy of *BT-Steps* was evaluated in a multicentre RCT (Greist et al. 2002). Two-hundred and eighteen OCD patients (DSM-IV criteria) were randomly assigned to 2 weeks of assessment followed by 10 weeks of treatment by a) *BT-Steps* (n=74) or b) traditional face-to-face CBT (TCBT) (n=69) or c) systematic relaxation guided by an audiotape and manual (n=75). Initial screening was by a clinician. Patients' OCD was initially severe (mean YBOCS = 25) and very chronic (mean duration 22 years), and they spent a mean total of 7.5 hours a day in rituals and obsessions. All patients saw a clinician for 15 min. at baseline and at the end of weeks 2, 6 and 10 to evaluate gains and safety of continued participation.

At baseline, the 3 treatment groups had comparable scores on the Yale-Brown Obsessive Compulsive Scale (YBOCS; Goodman et al. 1989), Work and Social Adjustment Scale (WSAS; Mundt et al. 2002, Mataix-Cols et al. 2005) and the Hamilton Depression Rating Scale (HAMD; Hamilton, 1960) and subsequent dropout rates were low - 14% for *BT-Steps*. Patients who had at least 1 evaluable post-week 0 visit [57 (82%) *BT-Steps*, 55 (86%) TCBT, 67 (89%) relaxation] were included in end-point intent-to-treat analyses. By week 10, the YBOCS improved significantly more with TCBT than *BT-Steps* (mean drop of 8.0 vs. 5.6), each of which improved significantly more than did relaxation (mean drop of 1.7), which was ineffective. On the YBOCS, effect sizes were 1.2, 0.8 and 0.4 respectively for TCBT, *BT-Steps* and relaxation. Similar results were obtained with some other outcome measures, but *BT-Steps* and TCBT each cut daily time

spent in rituals and obsessions by 3.4 hours, and improved comparably on work and social adjustment. Nor was TCBT superior to *BT-Steps* in completers of at least 1 ERP session (n=36, 65%). Thus, though more patients may have been motivated to do ERP with TCBT than with *BT-Steps*, once they began ERP they improved as much whether their ERP was guided by *BT-Steps* or by TCBT. In *BT-Steps* and in TCBT, patients who did >1 ERP session improved significantly more than those who did not. *BT-Steps* patients who improved at week 10 improved slightly further at week 26 after continuing access to *BT-Steps*, whereas TCBT and relaxation responders at week 10 who were followed up without further treatment worsened slightly on their YBOCS at week 26. After week 10, both *BT-Steps* nonresponders who were then switched to TCBT and relaxation nonresponders who were switched to *BT-Steps* improved significantly by week 26, though TCBT nonresponders who were switched to *BT-Steps* did not.

At endpoint, satisfaction was greatest with TCBT, next greatest with *BT-Steps*, and least with relaxation. TCBT and *BT-Steps* patients were significantly more satisfied than relaxation patients. More satisfaction correlated significantly with more improvement in each condition. *BT-Steps* saved 85% of usual TCBT therapist time, the remaining 15% of time having been spent on initial screening.

In brief, *BT-Steps* was more efficacious than relaxation on symptoms and social adjustment. TCBT was even more efficacious than *BT-Steps* on several measures but for patients who did at least 1 ERP (65%), *BT-Steps* was as efficacious as TCBT.

Another important question was whether *BT-Steps* is effective in routine clinical settings. *BT-Steps* was tested naturalistically in a primary care NHS Stress Self-Help Clinic for west London residents (Marks et al. 2003). Nine OCD patients used *BT-Steps* and 7 dropped out or gave no post-treatment data. The 9 completers improved significantly on the YBOCS with an effect size of 1.2, the 40% reduction being more than in the RCT.

Is a therapist necessary?

In the Greist et al. (2002) RCT patients had less than a mean total of 4 minutes support in all by a clinician by phone or email, but they did have to attend their clinic several times to give ratings and satisfy the ethical committees' requirements. This might have enhanced motivation. A key question is how much contact with a clinician is necessary during self-treatment with *BT-Steps*. A recent RCT (Kenwright et al. 2005) directly tested whether compliance and outcome with *BT-Steps* was enhanced by brief proactively scheduled phone calls from a clinician, with patients never attending a clinic or seeing a therapist. Forty-four referrals with OCD (DSM-IV criteria) from round the UK were randomly assigned to *BT-Steps* for 17 weeks with brief live phone support from a clinician either a) in 9 *scheduled* clinician-initiated calls (n=22) or b) only in *requested* calls from the patient (n=22). Patients in the latter group were advised to phone (an answerphone was left on outside office hours) if they had difficulty working through *BT-Steps*, upon which

the therapist phoned them back. All patients received the *BT-Steps* workbook, an ID for their IVR calls, and a phone number in case of problems. On their first call, patients chose their own 4-digit password.

At baseline, patients' OCD was chronic (mean duration 16 years) and severe (mean YBOCS = 26) with moderate depression (mean HAMD = 20), and 64% had failed with past TCBT. Each group improved significantly on YBOCS and WSAS. However, compared to *requested*-support patients, *scheduled*-support patients had significantly fewer drop outs (13.6% vs. 59.1%, respectively) and more improvement on the YBOCS and the WSAS (FIGURE 1). Compared to 3 past *BT-Steps* trials (Greist et al. 1998, Bachofen et al. 1999, Nakagawa et al. 2000, Greist et al. 2002), YBOCS improvement in this RCT was similar with scheduled support but less with requested support. Thus, despite their never attending a clinic, the patients as a whole improved significantly with *BT-Steps* on symptoms and work/social adjustment, and giving brief clinician support pro-actively in scheduled phone calls enhanced patients' compliance and improvement with *BT-Steps*. More research is needed to establish the minimum amount and type of human support that are needed for users of computer-aided self-help without cutting effectiveness, how much and what training supporters require, and when their support is best organized for regional or for larger populations.

Towards stepped care for the treatment of OCD

Many OCD patients do not seek help due to fear of stigma. When they do seek help, they may face long waiting lists and a shortage of suitably trained CBT therapists. Self-help approaches have the potential to help many more patients who would otherwise remain inadequately treated or untreated. To date, no controlled studies have tested the efficacy of self-help groups or bibliotherapy for OCD; this research is overdue. It will also be important to determine how much clinician input (if any) is needed to maximise the benefit of these treatments. Three small open trials and one RCT showed that brief ERP instructions delivered via the telephone by a clinician may be efficacious and save much clinician time. Open studies and RCTs demonstrated the efficacy, acceptability and feasibility of a computer-aided self-help system called *BT-Steps*. This and other systems are not clinician replacers but rather are clinician-extenders as a therapist still screened and briefly supported the patients. In the long run, the dissemination of these systems could save money for health services while increasing throughput of effectively-treated sufferers. We have proposed a stepped care model for the treatment of OCD (Mataix-Cols and Marks 2006; FIGURE 2). Less complex cases (i.e. less severe, better insight, less comorbidity, more motivated) can as a first step in care be offered imme-

Figure 1. RCT comparing *BT-Steps* plus brief live phone support from a clinician in either 1) 9 Scheduled clinician-initiated calls or 2) only calls Requested by the patient. The Scheduled group ($n=20$) improved significantly more than the Requested group ($n=16$) on the Y-BOCS (group \times occasion interaction effect: $F=7.0$, $p = 0.01$). Data from Kenwright et al. (2005).

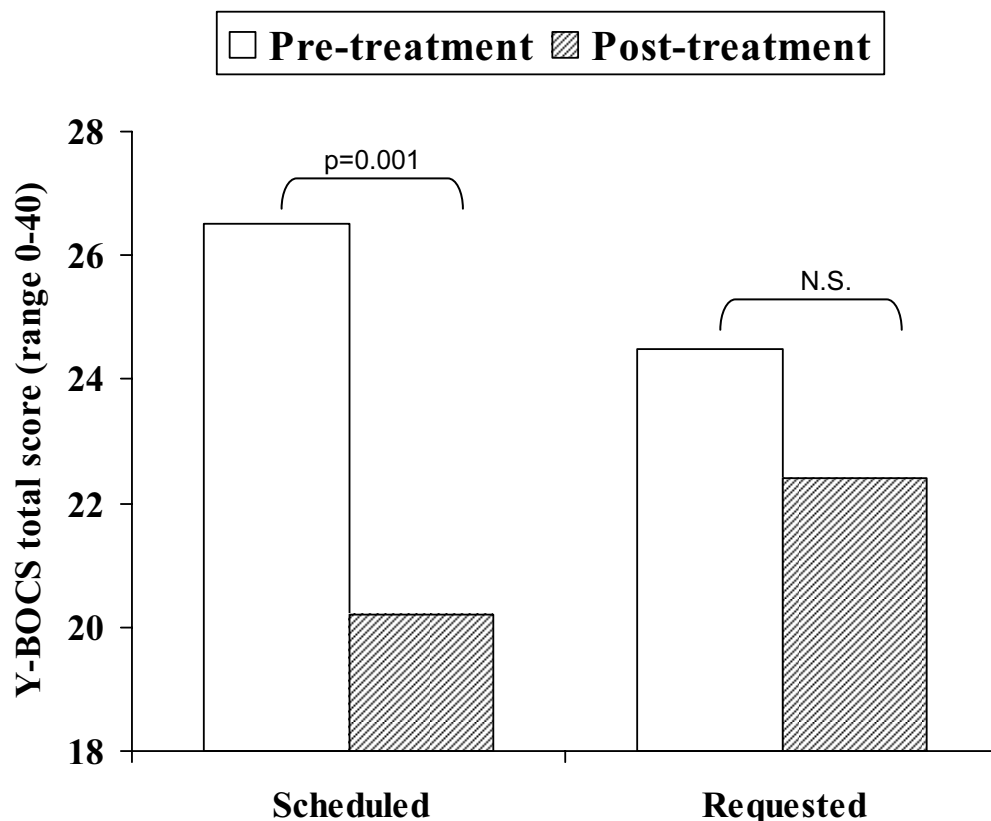
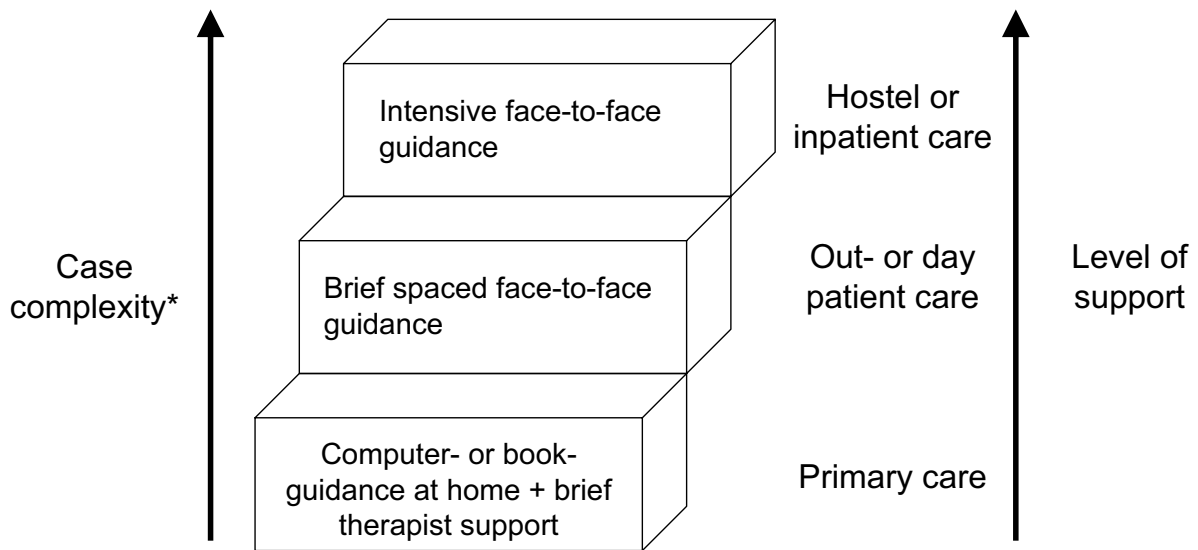


Figure 2. Proposed stepped care model for the treatment of OCD. Less complex cases can be offered self-help treatment with minimal support from a therapist at the primary care level. The level of therapist and institutional support raises with the case complexity although self-help is encouraged at every step. Adapted from Mataix-Cols and Marks (2006).



* >co-morbidity, < insight, <motivation

mediate access to self-help with minimal support from a clinician. This frees time for experienced therapists to take on more complex cases and could be done in primary care. More complex cases can be offered brief face-to-face sessions with a therapist in an ambulatory setting. Finally, severe or treatment-resistant cases can be offered intensive face-to-face treatment in a specialised hospital setting. In all instances self-imposed ERP is encouraged. Similar recommendations are made by the National Institute of Clinical Excellence in the United Kingdom (NICE 2005, Heyman et al. 2006).

Potential obstacles for the implementation of self-help therapy for OCD

Self-help had a trend towards more dropouts in some non-OCD studies, e.g. for panic/phobia (e.g. Marks et al. 2004), with dropouts being massive if users accessed web self-help sites which had hardly any human screening or support, whether for panic/phobia (Farvolden et al. 2005) or for depression (Christensen et al. 2004). Few OCD patients dropped out of *BT-Steps* in the Greist et al. (2002) RCT. In the Kenwright et al. (2005) RCT, therapist-initiated phone calls significantly cut attrition and enhanced outcome in OCD.

As noted earlier, the minimum amount, type and cost of human support needed to motivate patients to complete cost-effective self-help remains to be determined. Support cost would drop if research eventually found that a few days training might produce effective

phone supporters working from regional or larger centres. The cost of internet-accessed computer-aided self-help also depends on the size of the community for which funding is approved. For populations of 150,000 or more substantial volume savings can accrue.

Some mental health professionals may not wish to embrace self-help if they see it as a threat to their profession, even though incorporating it into their service allows them to help many more clients that is otherwise possible and frees them to work with problems which are not amenable to self-help.

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