Clinical Section

IF THE EVIDENCE IS SO GOOD – WHY DOESN'T ANYONE USE THEM? A NATIONAL SURVEY OF THE USE OF COMPUTERIZED COGNITIVE BEHAVIOUR THERAPY

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Abstract. Computerized Self-help (CSH) has recently been the subject of a NICE (National Institute of Clinical Excellence) review. This increase in interest is also reflected in the increase in advertising for CSH programmes. We report a national survey of a random sample of 500 therapists accredited with the British Association for Behavioural and Cognitive Psychotherapies, which is the lead organization for CBT in the UK. A total of 329 therapists responded (65.8%). A surprisingly small number of CBT therapists were using CSH (12 or 2.4%) and only 5 or 1% were using it as an alternative to patient-therapist contact. Despite this, over 90% of the responding therapists had not ruled out using CSH in the future, but the majority of these would use it to supplement rather than as an alternative to individual face-toface therapy. The need to know more about computerized self-help and the need for training in therapy using this modality were seen as the main factors that would have to change to allow the therapists to use CSH. Knowledge of and ability to use computers did not appear to be an important factor as most therapists in this sample used computers on a regular basis. Most therapists were not aware of evidence of the effectiveness of CSH but the minority who did feel able to express views stated that CSH would be less effective than individual face-to-face therapy and result in less client satisfaction.

Keywords: Self-help, survey, computers, treatment, cognitive behaviour therapy, attitudes, clinical practice.

Introduction

Cognitive behaviour therapy (CBT) has a strong evidence-base supporting its effectiveness in a range of common mental health disorders (DoH, 2001). Despite this, access to this treatment is often limited. There are currently just under 800 CBT practitioners who are accredited by the lead organization for CBT in the United Kingdom – the British Association for Behavioural and Cognitive Psychotherapies (www.babcp.com). It has been argued that most CBT is currently

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offered within specialist CBT services to only a highly selected number of patients (Lovell & Richards, 2000). As a result, the entry criteria for treatment are high, resulting in long waiting lists and limited access to treatment. One solution to this unmet need is to deliver CBT treatments in other ways. Lovell and Richards highlight the evidence base for alternative, shorter and more focused ways of delivering CBT. This includes delivery using written and computerized self-help materials.

Written self-help interventions (bibliotherapy) have been the subject of a number of metaanalyses (e.g. Cuijpers, 1997; Scogin et al., 1990; Gould & Clum, 1993; Marrs, 1995). It should be noted, however, that some of these meta-analyses did include other self-help approaches within the term "bibliotherapy". The study by Cuijpers examined in detail six studies that randomly allocated patients to bibliotherapy for depression group or a waiting list control group. This review did, however, also include computer-based treatments within its analysis. Nevertheless, bibliotherapy has a more robust evidence base for effectiveness than is the case for computerized self-help materials for mental health problems. The need for further research into the effectiveness of computerized CBT (CCBT) was highlighted in a NICE guidance document (2002). It concluded that CCBT had potential within a "stepped care" approach for the treatment of depression and anxiety, although the evidence simply is not of a quantity or general quality to be able to conclude that it is as effective as face-to-face CBT therapy. Only 11 RCTs were identified for the NICE document, all judged to be of "poor to moderate quality". It was also unable to deduce from the currently available evidence that CCBT has clinical superiority to equivalent written materials. Even less research has been carried out looking at the effectiveness of CCBT as an adjunctive treatment to face-to-face therapy rather than as a stand-alone treatment. The NICE document quotes three studies (Newman et al., 1996; Newman, Consoli, & Taylor, 1999; Wright et al., 2002). None of these studies were RCTs and only the Wright study involved appreciable numbers of patients. The latter study was a cohort study of 96 patients whose CCBT input was an addition to face-to-face therapy. The patients' satisfaction with the cognitive-based computer programme was high and there were significant improvements in outcome scores. What is not clear from this or other currently available evidence is the extent to which CCBT as part of a conventional therapist-led programme influences the amount of input required from the therapist, or the patient's benefit from CCBT component of the overall intervention.

A previous survey identified the extent to which CBT self-help materials were being used by BABCP-accredited CBT practitioners (Keeley, Williams, & Shapiro, 2002). This found that 88% of CBT practitioners regularly used self-help approaches. Written CBT materials made up the vast majority of all the self-help treatments that were being used.

This study aimed to investigate how many CBT practitioners currently use computerized self-help, how many have plans to do so in the future, and to identify the reasons for not using the materials at present.

Methods

Procedure

There are a total of 4500 members of the BABCP, although many of these do not practise CBT as such but rather have an interest in the approach. To be accredited with the BABCP there has to be evidence of ongoing clinical work of which at least half must be using a cognitive-behavioural approach. It was therefore decided that only the accredited members of

the BABCP would be questioned in the current study, as we could be certain of their ongoing contact with patients. There are therapists nonetheless practising CBT who are not accredited with the BABCP in the UK, especially as accreditation is not a compulsory prerequisite of practice. Therefore, it has to be acknowledged that the current sample of 500 therapists may not be representative of all CBT therapists in the UK. Nevertheless, the sample comprised active CBT practitioners working in a range of primary, secondary and tertiary delivery settings and from all practitioner backgrounds. At the time of this study there were 670 BABCP-accredited practitioners. A randomized sample of 500 of these 670 practitioners was used for the current study. Randomisation was carried out independently by BABCP staff using comp.soft, delta 5 computer software. The 500 accredited practitioners were then mailed a short written questionnaire and stamped addressed envelope for return in April 2001. Those practitioners who did not return their questionnaires were mailed for a second time in June 2001.

Materials

The questionnaire comprised 4 sides on 2 pages and included 28 items addressing the attitudes towards and use of CSH resources. Questions used open response, multiple response and restricted choice items.

Assessing current practice. Participants were asked whether they used computer-based self-help treatments for mental illnesses with their patients. Those who did use such materials were then asked to indicate the situations where they currently used them – specifically were they being used as an alternative or as an adjunct to other therapist-contact treatments? They were also asked to name the computerized treatment programmes that they were currently using.

Knowledge about CSH programmes currently available. An open question asked the practitioners to write down the names of any computerized self-help treatments that they were currently aware of. They were asked if they had read any outcome evidence for the effectiveness of computer-based self-help materials, or if they had received training in the use of CSH for clients.

Beliefs about the effectiveness of CSH. Questionnaire respondents were asked to rate on a likert scale of 1 (ineffective) to 5 (highly effective), "How useful do you believe computerized self-help materials are for the following disorders?" Seven mental health problems, including depression, social phobia and alcohol/substance misuses, were then listed. The practitioners were asked to rate whether they believed CSH was equal in effectiveness, more effective, or less effective than either written self-help materials or treatment through a therapist who was using a similar cognitive/behavioural approach. They were asked to consider the effectiveness in terms of benefits to the client, client satisfaction, compliance and expectancy of success, as well as the likelihood of relapse and potential harm of using the different approaches.

Assessing the potential for CSH use in the future. A multiple response question directed at those therapists not using CSH asked what factors would need to change before they would start to use CSH with their clients. The practitioners could respond to any number of the nine potential areas listed in Table 3. A simple yes/no question then asked whether they had concerns about the potential use of computerized self-help in the future. Two questions enquired into

the frequency of the therapists' general use of computers both inside and outside of the workplace. A multiple response question then asked the practitioners to state those potential situations (e.g. as an alternative to therapist contact) where they envisaged using CSH in the future. Yes/No questions then asked whether the practitioners would have concerns about patient confidentiality if patient responses were stored in a computer and if there would be enough security in their place of work to safely have a computer. The potential availability of IT (Information Technology) support for a CSH programme from the workplace was also enquired into.

Results

In total, 329 of the 500 practitioners (65.8%) returned completed questionnaires after the two mailings; 303 practitioners (60.6%) had returned the questionnaires after the first mailing.

Current use of computerized self-help materials with clients

In response to the question "Do you use computer-based self-help treatments for mental illness with your clients?" only 12 of the 323 practitioners who answered said that they did (2.4%). Nine of the 12 used CSH to supplement individual treatment, four used it with patients on waiting lists, and two used it for relapse prevention purposes. Only five practitioners stated that they used CSH as an alternative to practitioner contact. The two most frequently used programmes were Beating the Blues by four practitioners, and Calipso by three. Seven further titles were each used by only one therapist.

Knowledge about CSH programmes currently available

Two hundred and seven (or 67.2%) of the responding practitioners were unable to name any of the computerized self-help programmes currently available for mental health problems. A small minority (11.7% of responders) could name more than one. The most frequently cited programmes were: Beating the Blues by 77 practitioners, BT Steps for OCD by 23, Fearfighter for Phobias by 21, and Overcoming Depression or other Calipso products by 13. Just under half (48.0%) of practitioners had not read any outcome evidence on computerized self-help. The practitioners' perceived lack of training on the use of CSH materials was supported by the fact that only 21 respondents (6.4% of responders to this item) said that they had received any training themselves.

Beliefs about the effectiveness of CSH

When the therapists were asked about their views regarding the effectiveness of CSH for a variety of conditions it is notable that the majority responded by stating that they did not know (Table 1). This was particularly the case for social phobia and alcohol and substance misuse. They were more willing to give a view about more commonly treated conditions such as depression and panic. The practitioners indicated that they believed that CSH would be most effective for anxiety conditions, particularly panic and phobias, less effective for depression, and least effective for social phobia and alcohol and substance misuse.

When the cognitive and behavioural therapists were asked to give their views about the relative effectiveness of computerized self-help materials compared to a therapist using the

Table 1. Practitioners views regarding the effectiveness of CSH for different conditions – responses
were either "don't know" or a Likert scale score (range 1 to 5)

	No. of practitioners responding to the item	No. of practitioners answering 'Don't know' to item (% of total responders)	No. of practitioners responding with a score of effectiveness for condition (% of total responders)	Mean likert scale score assigned to condition (Range: 1 = "ineffective" to 5 = "highly effective")	Range of scores for item [Standard Deviation]
Depression	316	168 (53)	148 (47)	3.06	1–5 [0.89]
Phobias	312	162 (52)	150 (48)	3.51	1-5 [0.93]
Generalized Anxiety	313	183 (58)	130 (42)	3.03	1-5 [0.85]
Obsessive-comp. Disorder	307	179 (58)	128 (42)	2.85	1–5 [1.06]
Panic	311	179 (58)	132 (42)	3.42	1-5 [0.90]
Social Phobia	314	199 (63)	115 (37)	2.70	1-5 [0.99]
Alcohol/substance misuse	299	214 (72)	85 (28)	2.01	1–5 [0.96]

Table 2. The practitioners' ratings of the effectiveness of CSH relative to written self-help and face-to-face practitioner interventions

	Greater than with a practitioner	Equal to a practitioner	Less than with a practitioner	Don't know
	a practitioner	practitioner	a practitioner	Doll t know
Potential benefits to patient	5 (1.6%)	60 (19.0%)	117 (37.0%)	134 (42.4%)
Client compliance	10 (3.2%)	58 (18.5%)	113 (36.0%)	133 (42.4%)
Client satisfaction	2 (0.6%)	52 (16.5%)	124 (39.2%)	138 (43.7%)
Likelihood of relapse	43 (13.8%)	52 (16.7%)	58 (18.6%)	159 (51.0%)
Potential harm to patient	41 (13.1%)	50 (15.9%)	51 (16.2%)	172 (71.0%)
Client's expectancy of success	4 (1.3%)	48 (15.2%)	116 (36.8%)	147 (46.7%)
Overall effectiveness	nil	43 (8.6%)	111 (35.6%)	158 (50.6%)
	Greater than with written	Equal to written self-	Less than with written	
	self-help	help	self-help	Don't know
Potential benefits to patient	77 (24.8%)	90 (28.9%)	18 (5.8%)	126 (40.5%)
Client compliance	73 (23.5%)	86 (27.7%)	23 (7.4%)	128 (41.3%)
Client satisfaction	74 (23.8%)	87 (28.0%)	11 (3.5%)	139 (44.7%)
Likelihood of relapse	31 (10.1%)	101 (32.8%)	22 (7.1%)	154 (50.0%)
Potential harm to patient	17 (5.5%)	112 (36.4%)	17 (5.5%)	162 (58.1%)
Client's expectancy of success	64 (20.6%)	85 (27.4%)	12 (3.9%)	149 (48.1%)
Overall effectiveness	61 (19.9%)	78 (25.4%)	14 (4.6%)	154 (50.2%)

same cognitive-behavioural approach not one stated that CSH was overall more effective (Table 2). In terms of client compliance, client satisfaction, likelihood of relapse and potential benefits to the patient, between 35% and 40% of responders believed that the face to face therapy would have superior results. It is noteworthy, however, that the most common response

Factor that would need to change	Number of practitioners agreeing with item (% of responders for that item)
I need to learn more about computerized treatments	198 (61.7)
I would need training in how to use any programmes	175 (54.3)
A room/location for the computer would need to be identified	165 (51.2)
There would need to be more research showing that it is effective	154 (47.8)
Costs would need to come down	116 (36.0)
The approach would need to be recommended by my Trust/PCG/LHCC/NICE	112 (34.8)
British versions of the programmes would need to be made available	98 (30.6)
Need to get a computer	81 (25.2)
I need to feel more confident about using computers myself	54 (16.8)

Table 3. Factors identified by the practitioners that would need to change before they would use computerized self-help with their clients

by the therapists for each of these questions about effectiveness was that they did not know. For each of these items less than 4% of practitioners believed the opposite: that CSH was in general terms more effective than practitioner input. Only two therapists (0.6%) said that they believed that clients would be more satisfied with CSH than with direct therapist input. One hundred and twenty-four (39.2%) of responders felt the opposite, that the clients would be more satisfied with direct therapist face-to-face contact than with therapy from a computer.

When asked to compare CSH with written self-help materials (bibliotherapy), the most common response for each item was again "don't know". Many more therapists stated that computerized self-help materials would be more effective than equivalent written materials than vice versa. In particular, many more responders believed that clients would be more satisfied with self-help in computerized format (23.8%) than those who believed they would be satisfied with written self-help (3.5%). However, for all the items more therapists believed that self-help, whether in written or computer format, would be equally effective. Opinion was more divided in terms of the relative potential harm to the clients of CSH, bibliography, and practitioner contact. Once again, the majority did not feel confident to indicate that either one would be more harmful.

Assessing the potential for CSH use in the future

When the practitioners were asked to choose from a list of nine potential responses those factors that would need to change before they would use CSH with their patients (Table 3), the most commonly identified factor was the need to learn more about computerized treatments (62%). Similarly, just over half stated that they would need training in how to use the programmes. The next most frequently cited factor that would need to be attended to (by 51%), was the need to identify a location to put the computer. Just under half (48%) of the respondents stated that they would need more research showing that CSH treatments were effective. Less than one in five (17%) of the practitioners said that they would need to feel more confident about using

Factor	No. practitioners responding (%)
To supplement individual therapy	255 (80.7)
For relapse prevention	221 (69.7)
To clients on a waiting list	146 (46.1)
To supplement group therapy	106 (33.5)
As an alternative to practitioner contact	86 (27.1)
I don't envisage using them at all	29 (9.1)

Table 4. Situations in which the practitioners could envisage using CSH in the future (n = 317)

computers themselves. The practitioners' proficiency with computers was also illustrated by the fact that 77% of those who responded said that they used them in their workplace on at least a weekly basis. An even greater proportion (84%) used them on a similar frequency basis outside of the workplace.

Almost half (48.8%) of the practitioners said that they had concerns about the potential increased use of CSH in the future. Fifty-six per cent said that they would have concerns about patient confidentiality if the patients' responses were stored on a computer. Just 43% of practitioners were aware of the implications of the Data Protection Act on computer-based self-help. Twenty-one per cent predicted that they would not receive IT (Information Technology) support from their organization if they installed a computer treatment package, 40% thought that they "probably would", but only 16% were confident that they "certainly would". The remaining 75 responding practitioners (23.4%) did not know if they would or not. Eighty-one per cent thought that there was enough security where they worked for a computer to be placed securely.

When asked about the situations in which the practitioners could envisage using computerized self-help materials in the future it is noteworthy that only 29 practitioners (6% of the responders) had ruled out using them in the future (Table 4). Most (81%) could envisage using CSH to supplement individual treatment, and far fewer could see themselves using it to supplement group treatment (34%). Just less than half (46.1%) stated that they could envisage using the materials for patients on a waiting list. Only one-quarter of the responders said that they would use CSH as an alternative to practitioner contact in the future.

Discussion

The 65.8% response rate is good for a postal survey of this sort. The 329 therapists who replied to the questionnaire represent just under half of the total population of therapists accredited with the lead organization of cognitive and behavioural therapies in the UK – the BABCP. The sample includes experts who work in a variety of clinical settings and come from a variety of professional backgrounds. The overwhelming message found in this survey is the confirmation that the use of computer-based self-help materials is still at a very low level amongst practising cognitive and behavioural psychotherapists. Only 2.4% of the respondents in this sample of 500 practitioners use them at all. Yet the potential for computerized self-help, at least when based on a cognitive behavioural model, would appear to be very significant indeed in that more than 90% of respondents had not ruled out using computer-based self-help in the future. It may be that other health professionals are using computerized self-help to a far greater

degree. For example, it may be that CSH has more of a role in primary care where the services have greater problems accessing therapy services in the first place. CBT specialists may see less need for CSH because their patients are already getting CBT (albeit with long waiting lists).

This study clearly points to a number of concerns held by this British population of cognitive-behavioural therapists that will need to be addressed if CSH is to be taken up to any significant degree in the future. The two main blocks to the introduction of such approaches were the need to find out more about computerized treatments, and to receive training in how to use the programmes. Both factors were identified by more than half of the practitioners as having to change before they would use CSH. These factors were endorsed more highly than purely practical issues such as needing to obtain a computer or becoming proficient in the use of computers per se. The lack of knowledge about CSH was nicely illustrated in this study by the way the therapists responded to the questionnaire itself. Thus, for many question-items, such as the items asking about the therapists' views regarding the effectiveness of CSH for different conditions, far and away the most common response was "Don't know".

The finding that only 6.4% of respondents had received any training in the use of CSH is in contrast to the previous findings that 36.2% of practitioners had been trained in how to use self-help treatments in general (Keeley et al., 2002). This may reflect the fact that it is only recently that well-packaged and widely available CSH programmes have become available, so that there has not been much of a chance for training courses to incorporate them yet. The fact that a number of other barriers apart from training were identified by this population as needing to change before they would use CSH may mean that it will take more than simply training before we see a significant uptake in self-help using this modality. The potential for the use of computerized self-help materials in these practitioners' practice is significant in that the majority appear computer-literate and have access to IT support and a secure place to house the equipment. In spite of this, about half of our sample said that they had concerns about the potential increased use of CSH. The potential for problems with confidentiality is identified as an issue of concern, as is the current lack of evidence in the eyes of many of the practitioners that CSH is as effective or as acceptable to clients as practitioner contact.

It is noteworthy that one factor identified by the therapists in an open question item as a barrier to their use of CSH is the issue of who is responsible for the patients whilst they use the self-help approach. This may be a clue to why so many practitioners are willing to have such lengthy waiting lists rather than use approaches such as CSH on clients residing on these waiting clients. A number of therapists responded that they would have significant concerns about taking clinical responsibility for a patient/client who was interacting not with them but with a computer. Although some programmes have integrated questions about risk, the majority of practitioners utilize much more than factual replies to make an overall judgement on the current clinical state of their client. It is perhaps this latter point that explains why even among those practitioners who envisage that they will make use of computerized self-help materials in future, it is only a small minority who see themselves offering it as an alternative, rather than as a supplement to practitioner contact.

The important issue of the perceived lack of knowledge by the practitioners about the evidence base for the effectiveness of CSH compared to treatment with a practitioner or using written self-help materials also needs to be addressed. The perceived lack of knowledge of a clear evidence base is congruent upon there not actually being a clear evidence base. It is unclear whether these relatively expensive treatment packages offer any benefits at all

over a simpler health technology – bibliotherapy – which is much more frequently used by practitioners (Keeley et al., 2002). Self-help books are also not prone to breakdown or breaches of patient confidentiality, and have relatively low support costs. It is noteworthy that very little work has been done to compare bibliotherapy and computerized self-help equivalents (Ghosh, Marks, & Carr, 1988; NICE, 2002). Perhaps if more information on the clinical effectiveness of CSH in real life clinical situations becomes available, then practitioners might be more willing to take the perceived risks in integrating self-help using computers into their overall practice.

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References

- DEPARTMENT OF HEALTH (2001). Treatment choice in psychological therapies and counselling. London: HMSO.
- CUIJPERS, P. (1997). Bibliotherapy in unipolar depression: A meta-analysis. *Journal of Behavioural Therapy and Experimental Psychiatry*, 28, 139–147.
- GHOSH, A., MARKS, I. M., & CARR, A. C. (1988). Therapist contact and outcome of self-exposure treatment for phobias. A controlled study. *British Journal of Psychiatry*, 152, 234–238.
- GOULD, R. A., & CLUM, A. A. (1993). Meta-analysis of self-help treatment approaches. *Clinical Psychology Review*, 13, 169–186.
- KEELEY, H., WILLIAMS, C. J., & SHAPIRO, D. (2002). A United Kingdom survey of accredited Cognitive Behaviour Therapists' attitudes towards and use of structured self-help materials. *Behavioural and Cognitive Psychotherapy*, 30, 191–201.
- LOVELL, K., & RICHARDS, D. (2000). Multiple Access Points and Levels of Entry (MAPLE): Ensuring choice, accessibility and equity for CBT services. *Behavioural and Cognitive Psychotherapy*, 28, 379– 391.
- MARRS, R. (1995). A meta-analysis of bibliotherapy studies. *American Journal of Community Psychology*, 23, 843–870.
- NEWMAN, M. G., CONSOLI, A. J., & TAYLOR, C. B. (1999). A Palmtop computer program for the treatment of generalized anxiety disorder. *Behavior Modification*, 23, 597–619.
- NEWMAN, M. G., KENARDY, J., HERMAN, S., & BARR TAYLOR, C. (1996). The use of hand-held computers as an adjunct to cognitive-behaviour therapy. *Computers in Human Behavior*, 12, 135–143.
- NATIONAL INSTITUTE OF CLINICAL EXCELLENCE (NICE) (2002). Issues guidance on computerized cognitive behavioural therapy for anxiety and depression: *Technology Appraisal Guidance No. 51*. London: NICE. (www.nice.org.uk).
- SCOGIN, F., BYNUM, J., STEPHENS, G., et al. (1990). Efficacy of self-administered programs: Meta-analytic review. *Professional Psychology: Research and Practice*, 21, 42–47.
- WRIGHT, J. H., WRIGHT, A. S., SALMON, P., BECK, A. T., KUYKENDALL, J., GOLDSMITH, L. J., & ZICKEL, M. B. (2002). Development and initial testing of a multimedia program for computer-assisted cognitive therapy. *American Journal of Psychotherapy*, 56, 76–86.