Empirically Grounded Clinical Interventions Clients' and Referrers' Perceptions of Computer-Guided CBT (FearFighter)

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Background: Computer-guided CBT has been shown to be a potentially useful way of closing the gap between the demand and supply for CBT. Moreover, this approach has additional benefits in terms of less travel times for treatment, accessibility in remote and unusual locations, increased confidentiality, easier disclosure of sensitive information, and more egalitarian therapist-client interactions. Research on computerized CBT has concentrated on clinical outcomes, but the views of clients on this treatment approach have been relatively neglected. **Aims:** The aims were to assess client satisfaction, professionals' views, and ease of programme use after completion of treatment via an internet-based CBT programme for panic and phobic anxiety (FearFighter). **Method:** A feasibility and effectiveness study of FearFighter was conducted in remote and rural areas of Scotland. Treatment data are available for 35 clients at post-treatment, of whom 29 completed an 18-item set of rating scales designed to assess satisfaction, including ease of use, accessibility, how far needs were met, whether changes to the programme were required, the benefits and drawbacks of not having a therapist, and quality of support. Open-ended questions were included. Referring agencies were also asked to rate their views on FearFighter. **Results:** Clients reported moderate to high levels of improvement and of overall satisfaction; very few difficulties in logging on to and using the programme were encountered. Similar levels of satisfaction with the programme were reported by referrers. **Conclusions:** It is concluded that computer-guided CBT is acceptable to clients and to professionals, and that it could play a valuable part in a "stepped care" system of delivering CBT.

Keywords: Computer-guided CBT, client satisfaction, panic, phobic anxiety, feasibility, acceptability, rural.

Introduction

Cognitive behaviour therapy (CBT) has been shown to be an effective treatment for a wide range of disorders, especially anxiety and depression (Hawton, Salkovskis, Kirk and Clark, 1989). However, there is a wide gap between the demand and supply for these treatments, despite the increasing number of professions whose members have incorporated CBT in their therapeutic armoury. One potential way to fill this gap is to use self-help techniques, including the use of modern technologies in the delivery of services (Richards, Lovell and McEvoy, 2003). Such technologies have included the telephone, video-conferencing, the internet, CDs, virtual reality, and palm top computers. The evidence supporting the efficacy of using technologies in service delivery is promising; many randomized controlled trials have been conducted, with largely positive results. It appears that clinical outcomes achieved via technology-based therapy are comparable with outcomes achieved via face-to-face therapy.

The most common technology for delivering CBT uses computer-guided programmes, via the internet or CDs (CCBT). The evidence in favour of this approach is particularly strong, and the National Institute for Health and Clinical Excellence has recommended two programmes: FearFighter for panic and phobias, and Beating the Blues for depression (NICE, 2006).

In most of the studies on technology-based CBT the focus has been on clinical outcomes, with clients' views being relatively neglected. However, some studies have assessed client satisfaction. For example, in a study on telephone administered treatment for obsessional compulsive disorder (Lovell et al., 2006), the telephone group and a face-to-face group recorded similar high levels of satisfaction using an 8-item 0–4 rating scale (Attkinson and Zwick, 2003). High satisfaction ratings of technology-based therapy have also been reported using video-conferencing in the treatment of obsessional compulsive disorder (Himle et al., 2006); in a controlled trial of CCBT versus treatment as usual for depression (Dolezal-Wood, Belar and Snibbe, 2006); and in a controlled trial of CCBT versus group CBT for anxiety and depression (Proudfoot et al., 2004).

There are several limitations to the evidence concerning CCBT; for example, most studies have used highly selected client groups; there has been a preponderance of urban at the expense of rural clients; and programmes have usually been evaluated by the researchers who developed them (thus having vested interests).

The present study was designed to overcome some of these limitations: clients were not selected (apart from having a relevant problem, being over 16, and able to read); all lived in remote and rural areas of Scotland; and none of the research team had any vested interests in the programme used. Full details of this feasibility and effectiveness study have been reported previously (Hayward, MacGregor, Peck and Wilkes, 2007). Briefly, 55 clients (who were mainly referred by GPs) received a password to use FearFighter (an internet based programme for panic and phobic anxiety) as often as required over 10 weeks. The average age was 40.2 years ($SD = 11$, range $= 19$ to 69); two-thirds were female. Educational levels covered a wide range, with 45% having received further or higher education (two at postgraduate level). Occupations were 53% manual (e.g. farm worker); 25% professional (e.g. dentist, nurse, teacher); the remainder were retired, unemployed, or not seeking work.

Support was available by telephone during office hours; in addition, one of the project team contacted the patients by telephone about once every two weeks. Of the 55 who received a password, 35 embarked on the programme (20 did not start or started too late to be included). Eight patients borrowed a computer and a printer from the project; all other patients had

ready access to the internet at home, a relative's house, or at work. The 35 patients provided post-treatment data on eight outcome measures (e.g. the Beck Anxiety Inventory and the Fear Questionnaire), some of which were independent of the FearFighter programme. There were significant improvements on all relevant measures, with moderate to large effect sizes; the improvements remained at 4-month follow-up.

A comprehensive questionnaire was developed to assess the views of clients on CCBT in general, and on the FearFighter programme in particular. A short questionnaire was also developed for completion by the referrers. This paper reports the responses to these questionnaires. Originally, it was planned to compare outcomes with those obtained with face-to-face CBT, but the local health authorities were concentrating resources on severe and enduring mental health problems. Thus no face-to-face comparison group was available, suggesting that in some areas, self-help such as CCBT may be the only source of specialist support.

The project was funded by the Chief Scientist Office of the Scottish Executive Department of Health.

Method

The project was submitted to NHS Highland Research Ethics Committee, and was approved. The 21-item patient questionnaire comprised 18 ratings on a 1–4 scale, plus three open-ended questions on what clients liked about FearFighter, what they did not like, and additional general comments; it was completed by the clients at the end of treatment. The short 3-item questionnaire for the referrers was also completed at the end of treatment. Details of the format and content of both questionnaires can be seen in the Results section.

Results

Client questionnaire

Six of the 35 clients did not complete the questionnaire. On four questions not all clients responded; the number of responders is shown in brackets.

1. How would you rate the quality of service you received in relation to FearFighter? (29/29)

Poor	1
Fair	8
Good	13
Excellent	7

2. To what extent has FearFighter met your needs? (29/29)

None of my needs have been met	6
Only a few of my needs have been met	14
Most of my needs have been met	6
Almost all of my needs have been met	3

3. If friends were in need of similar help, would you recommend FearFighter to them? (29/29)

No, definitely not	1
No, I don't think so	4
Yes, I think so	14
Yes, definitely	10

4. How satisfied are you with the amount of help and advice you received to use FearFighter? (29/29)

Quite dissatisfied	0
Indifferent or mildly dissatisfied	1
Mostly satisfied	17
Very satisfied	11

5. Has FearFighter helped you to deal more effectively with your problems? (29/29)

No, it seemed to make things worse	0
No, it didn't really help	13
Yes, it helped somewhat	11
Yes, it helped a great deal	5

6. If you were to seek help again, would you come back to FearFighter? (29/29)

No, definitely not	2
No, I don't think so	8
Yes, I think so	13
Yes, definitely	6

7. Did you find it easy to log on to FearFighter? (29/29)

No, it was very difficult	1
It was quite difficult	1
It was quite easy	7
Yes, it was very easy	20

8. Was FearFighter easy to use once logged on? (29/29)

Very difficult	0
Quite difficult	1
Quite easy	10
Yes, very easy	18

9. Were the FearFighter instructions clear? (29/29)

Very unclear	0
A little unclear	2
Quite clear	15
Very clear	12

10. Were there any difficult parts in FearFighter? (29/29)

Yes, a lot	3
Quite a lot	4
Hardly any	12
No, none	10

11. Were there benefits of using a computer, rather than a therapist, to treat your problems? (27/29)

No, definitely not	2
No, I don't think so	8
Yes, I think so	11
Yes, definitely	6

What were the benefits?

12. Were there any drawbacks with not having a therapist present? (27/29)

Yes, definitely   7
Yes, I think so   11
No, I don't think so   8
No, definitely not   1
What were the drawbacks?

13. Did you get to sit down and go through FearFighter without any distractions? (28/29)

No, not at all   2
Some of the time   4
Most of the time   7
Yes, all of the time   15

14. Did anyone help you to get FearFighter working? (29/29)

No, never   23
Hardly ever   2
Occasionally   2
Yes, most of the time   2
If you did get help, whom was it from?

15. Did anyone help you to work through FearFighter? (29/29)

No, never   25
Hardly ever   1
Occasionally   2
Yes, most of the time   1
If you did get help, whom was it from?

16. Was FearFighter relevant for people living in country areas? (28/29)

No, lots not relevant   1
No, seldom relevant   0
Yes, some of the time   12
Yes, all the time   15
If not, please say which bits were not relevant

17. Did FearFighter ever break down? (29/29)

No, never   20
Hardly ever   6
Yes, a lot of the time   3
Yes, most of the time   0

18. Are there any parts of FearFighter that should be changed? (25/29)

No, none of it   13
A little of it   9
Yes, a lot of it   2
Yes, most of it   1
Which parts should be changed?

Themes from open-ended questions

Direct quotes are given to illustrate responses; the number of clients who made similar responses on the same theme appears in brackets. Occasionally, clients made a complex

response that fitted more than one theme; all such responses are included in the data below. Comments made by only one client are not reported.

The benefits of using a computer (Question 11)

"Able to do it in my own time scale" (6 clients)
"Not having to face someone" (5 clients)

Drawbacks of not having a therapist (Question 12)

"No one to discuss things with" (4 clients)
"Computer is unable to answer all the supplementary questions that arise" (4 clients)
"The situations were not relevant to my particular needs" (3 clients)
"No appointments, so no incentive to enter and complete programme" (3 clients)
"I feel I can relate better with people than computers" (2 clients)

Help to get FearFighter working (Question 14)

Three clients obtained help from the project manager, and three from a family member.

Help to work through FearFighter (Question 15)

Two clients obtained help from the project manager; two from a family member, and one from a friend.

Relevance of FearFighter in country areas (Question 16)

One client responded that city centres and buses were not relevant in her area; another said that were no lifts where she lived.

Which parts of FearFighter should be changed? (Question 18)

"A lot of it seemed specifically aimed at people with definable phobias rather than more generalized anxiety and panic" (4 clients).
"Too simplistic" (2 clients).

What was liked about FearFighter

"I liked the fact that it was all done in the comfort of my own home and in my own time" (6 clients)
"It was very clear and easy to use" (4 clients)
"I worked in my own time; it made me think about my answers" (3 clients)
"Ability to work at own pace" (2 clients)

What was not liked about FearFighter

"Would prefer to talk to someone face to face" (6 clients)
"It did not relate to my particular problem" (4 clients)
"Too rigid" (3 clients)

Additional client comments

"It helped me address my problems and was then able to tackle them on my terms" (2 clients)
"FearFighter is a good idea but it did not work for me" (4 clients)
"Needs more direct therapist support" (2 clients)

Referrers' questionnaire

Fifteen of the mental health professionals who referred clients to the project (14 out of 20 GP practices and 1 out of 6 CPNs) returned the questionnaire. Of the 12 who responded to a question about level of improvement, 9 considered that the clients had improved at least "to some extent". All responders considered that FearFighter was suitable for use in rural areas in Scotland, and were satisfied with the communication and advice received from the project team at least "to some extent".

Discussion

The patient questionnaires show that the majority obtained some benefit from using FearFighter in that most (23 out of 29) improved, but the majority of these (14) improved only to a small extent, and only about a third felt that most or all of their needs had been met by the programme; just over a half considered that FearFighter helped them to deal more effectively with their problems. This modest level of improvement appears to be inconsistent with the moderate to large effect sizes (*d*) that were obtained on comparing pre- and post-treatment changes on a range of outcome measures (Hayward et al., 2007). However, effect sizes are often inflated when based on within subject, rather than between subject, differences.

Mental health professionals were willing to refer patients for CCBT and perceived some benefits in their patients; they were satisfied with the level of support offered to patients. The content of FearFighter was considered suitable for rural patients.

Although most patients benefited only slightly or not at all from the programme, the majority of all the patients (including those who derived little benefit) would recommend FearFighter to a friend; and most would try FearFighter again if they were to seek further therapy. This, plus the responses to the open-ended questions, suggests that patients who did not benefit had no misgivings about the programme per se, or about the CCBT approach in general; rather, the content of FearFighter did not match their particular problems. Perhaps the limited match between the content of FearFighter and the individual problems of patients is to be expected considering that CCBT programmes such as FearFighter constitute the first generation of internet-based treatment approaches. With advances in technology, it can be anticipated that programmes will become more sophisticated, enabling the creation of highly individualized treatments.

Patients and mental health professionals reported high levels of satisfaction with the support and advice given during the project. It is important to note that this support was given by telephone; thus the additional costs that would be involved if face-to-face support were provided do not appear to be justified. However, arrangements should be in place to provide clinical support in an emergency; this was not required at any time during this project. It is therefore unlikely that the poor response of some patients to FearFighter is attributable to inadequate support. Similar high levels of satisfaction with the support provided have been reported in other studies (Marks et al., 2003).

Using the technology behind FearFighter caused few problems, virtually all patients finding it easy to log on to and to use; instructions were considered to be clear and there were few reports of difficulties or breakdowns. Few needed help to use the system. The content was generally appropriate for rural dwellers (except for references to city centres, buses and lifts), and no parts required major changes.

Perhaps the most interesting comments from patients related to the benefits and drawbacks of the CCBT approach. Patients valued being able to take their time in working through the programme, at a convenient time for them, in their own home, and without having to discuss sensitive issues with another person. On the other hand, they missed having someone to talk to and with whom to discuss other related issues; a few patients had difficulties in motivating themselves to use the programme because they were working on it alone.

There was no direct therapist contact during this project, and the patients were unselected; despite this, most showed at least a little improvement. These data are therefore promising and suggest that delivering therapy by computer can be a useful approach to plugging the gap between the demand for, and the supply of, CBT. CCBT could be particularly useful as part of a "stepped care" approach to service design, especially if it were available on a national scale and therefore with no extra costs per user. Patients could be assessed by a local community mental health team (CMHT), and CCBT could be offered to all patients who seemed to be suitable (although we do not yet have a validated way to assess suitability for CCBT). Patients who refuse to try it, or who do not improve, could subsequently be offered conventional therapy. If the size of the local population warrants it, a designated member of the CMHT (or the primary care team) could provide the necessary support for CCBT users.

About three-quarters of rural dwelling patients in this study had ready access to the internet, albeit not necessarily in their own homes. For those without ready access, providing a computer and a printer added considerably to the costs of the project (for eight patients), not just in the initial purchases but also in the travel involved in delivering and collecting the machines in remote areas. More efficient and creative ways of providing internet access to rural patients should be employed, such as using computers in health centres, CMHT premises, libraries or voluntary organizations, with steps taken to ensure that confidentiality and privacy remain paramount. Using CCBT on computers that are not located in clinics has been reported previously (e.g. Marks et al., 2003).

The conclusions of this study should be interpreted with caution. The number of patients who provided questionnaire data (29) was small, but this was a reasonable proportion of those who returned post-treatment data (35). With a larger sample it would be possible to explore sub-group differences in satisfaction with CCBT, such as differences related to gender, age, or computer experience.

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