opinion
& debate

ISAAC MARKS

Psychiatry in the future

Information technology can pull mental health care into the 21st century

A hundred and fifty years ago, physical disease was known to be widespread but was usually untreated. Anxiety and depression is now like that. Up to a fifth of the entire population are affected, of whom 84% were untreated in a UK community survey (Bebbington *et al*, 2000). 'Developed' countries are underdeveloped when it comes to treating anxiety and depressive disorders, even though effective treatment is available in the form of brief cognitive–behavioural therapy. In the UK, waiting times for such therapy can be as long as 2 years. Routine therapy outcomes are rarely reported. The delivery and monitoring and also teaching of therapy still largely conform to a 19th century model, and could be advanced by greater use of information technology. Such technology could catalyse a model of community care delivered mainly in the home, by enhancing access to effective self-help, audit of outcome and professional training.

The National Health Service (NHS) could apply information technology to mental health care in two ways. First, when health care professionals diagnose an anxiety or depressive disorder in the course of a consultation, they could print out and give to the patient an approved information leaflet containing self-help guidance. Second, professionals could prescribe for patients a password giving round-the-clock access to interactive self-help guidance at home, either using the Internet or by telephone using interactive voice response, plus brief helpline advice from a live therapist if necessary. A prerequisite for prescribing such passwords is NHS funding for these in the same way that the NHS funds medication prescriptions.

Computer-aided therapy in a west London clinic

Computer-aided cognitive–behavioural therapy has been used successfully in a NHS self-help clinic in west London (Marks *et al*, 2003). The clinic's four computer-aided therapy programs – for panic disorder and phobias; general anxiety; obsessive–compulsive disorder; and non-suicidal depression – had been found to be effective in open studies and in randomised controlled trials. Patients initiated referral to the program by completing and sending to the clinic a screening questionnaire which they had obtained from their general practitioner's surgery, a mental health centre or elsewhere. This triggered an offer of a 30 min screening interview with a therapist, face to face or by telephone, to assess the person's suitability for one of the therapy programs.

Most people thus referred were suitable and were given access to the appropriate computer-aided therapy system. Two systems could be accessed by telephone from the patient's home: *Cope* for depression (Osgood-Hynes *et al*, 1998) and *BTSteps* for obsessive–compulsive disorder (Greist *et al*, 2002) – using interactive voice response and a manual to assist calls. Patients seeking treatment for phobia originally used the *FearFighter* system (Marks *et al*, 2004) in the clinic; later patients used the Internet version of *FearFighter* at home when it became available. Patients with general anxiety used the *Balance* system (details available from The Mental Health Foundation, 83 Victoria Street, London SW1H 0HW) in the clinic. Users having difficulty with a system had brief advice from a therapist, either face-to-face at the clinic or by phone.

The clinic's results were encouraging. Users of the computer-assisted therapies improved significantly in measures of distress and disability. The therapist managed four times more referrals by delegating routine aspects of care to computer-aided therapy than would have been otherwise possible itself. Therapist contact with patients was reserved for the initial screening (which itself could be done largely by electronic communication) and to give brief advice if the patient's progress was slow. Computer-aided delivery could reduce the cost per patient of cognitive–behavioural therapy by almost half for large numbers of patients.

Benefits of home-based computer-aided therapy

Patients

Computer-aided self-help at home offers patients many benefits:

- unlimited guidance is available around the clock, by Internet or telephone, with live helpline back-up as needed;
- freedom from having to travel to a clinic is particularly valuable for people housebound by agoraphobia, people at work and hard-pressed parents;
- many people prefer to disclose sensitive information to a computer, rather than to another person;
- the patient has a sense of self-empowerment;
- access is always to the most recent form of therapy, as Internet and telephone systems can be updated more easily than CD-ROMs and books.

Health care professionals

Health care staff are able to provide effective treatment to many more patients per day by delegating many therapy tasks to computer systems. The self-help systems

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are 'clinician extenders' (not 'replacers'), cutting per-patient time and cost. Giving patients home access to the programs leads to savings in both the space and expenses needed to offer computer-aided therapy in a clinic and to update the systems at intervals.

Therapists and managers

Therapists and managers, as well as patients, benefit from the rapid audit of outcome and the cost of therapy.

Researchers

The use of computer-aided systems could speed up the study of many psychotherapeutic processes; such systems can be modified to vary the therapeutic ingredients, and every key press by patients can be recorded and analysed.

Students and their teachers

Self-education tools save teaching time; in a randomised controlled trial, medical students learned as much from a *FearFighter* variant as from a face-to-face tutorial (McDonough & Marks, 2002).

Implementing computer-aided therapy

Computer-assisted self-help can be accessed through the Internet or by telephone not only at home but also in general practice surgeries and other primary and secondary care settings, libraries, pharmacies and super-markets, together with brief advice from a helper.

Who the helpers should be needs testing. So far they have mainly been nurses, psychiatrists or psychologists familiar with each self-help system. Non-clinical administrators too have advised a few users after going through all of *FearFighter*'s steps in the role of a patient. Just 2 days might suffice to learn enough about one of these self-help systems to qualify as a helper. Helpers could be based locally, regionally or nationally, at call centres resembling those of NHS Direct.

Adverse effects? Some professionals fear computer-aided therapy systems might make them redundant, but in fact these new techniques do not replace clinicians but rather allow staff to use their time better on tasks that a computer cannot do. Medicolegal issues will arise eventually, when patients sue in the way that they do after face-to-face therapy.

In conclusion, with careful organisation, funding and monitoring by the NHS and teaching establishments, computer self-help systems could greatly speed access to effective treatment, outcome audit and teaching.

Declaration of interest

I.M. has intellectual property rights in *Cope*, *BTSteps* and *FearFighter*.

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