Special Article

Behavioural approaches to anxiety disorders

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Summary: Powerful behavioural treatments for many patients with anxiety disorders have been widely available since the 1970s. Despite this, the majority of such patients have continued to be treated with psychotropic drugs. Recent litigation against the manufacturers of benzodiazepine drugs has made the public increasingly concerned about the prescription of anxiolytic agents. In parallel with the fall in popularity of drug treatment, advances have been made which increase the availability and applicability of behavioural treatments for these patients. This paper examines the impact of the development of self-exposure and cognitive methods on a number of common anxiety syndromes. Clinical examples of self-exposure are given to demonstrate the simplicity of the technique.

The anxiety disorders

The symptoms of anxiety are a universal experience. Anyone who has sat an examination, been to a hospital for medical treatment or been late in catching a train to an important engagement has experienced some of the symptoms. Everyone differs in their baseline levels of anxiety or trait anxiety and the situations which provoke anxiety or state anxiety.1 Pathological anxiety can, therefore, only be defined by being anxiety which is more severe or more frequent than the individual can tolerate or is accustomed to experience.2

Anxiety symptoms are seen in almost any psychiatric syndrome and this is particularly true of those disorders known as the neuroses. The term anxiety disorders is usually used to describe disorders in which pathological anxiety is the main feature and includes phobic disorder, obsessive–compulsive disorder, hypochondriasis, post-traumatic stress disorder and generalized anxiety.

The fall of the benzodiazepines

Recent litigation against the manufacturers of benzodiazepine drugs has resulted in extensive media coverage and public concern about the treatments offered to patients with chronic anxiety. Although the dependence potential and the risks of a withdrawal syndrome following the ingestion of benzodiazepine drugs was suspected in the late 1960s3,4 and was the subject of numerous case studies in the 1970s5-9 it was not until the 1980s, following several British studies which demonstrated this effect,10-11 that these effects were widely publicized in the British medical literature.12

The rise in behavioural psychotherapy

Behavioural treatments have been developing and expanding in the number of clinical indications since the 1950s.13 Despite its dramatic success in a wide range of psychiatric conditions, there is often fear of using it outside specialist centres. This appears to arise from erroneous views about its applicability, its success rates, the time commitment required by the therapist and also fear of the unknown. In fact, behavioural psychotherapy is a remarkably quick and cost-efficient treatment which can be easily applied in many general practice and hospital settings.13-15 Although some basic training is required, this can easily be obtained by reading some of the books written on the techniques in practice14,16 and obtaining some supervision from a trained behavioural psychotherapist.

Exposure treatment has been shown to be effective in 66% of agoraphobics17 between 75 and 85% of obsessive–compulsives18,19 and to have success rates up to 90% in a mixture of specific phobics.14

The principle of the treatment of most anxiety disorders is the use of exposure or encouraging the patient to face up to the situation or object that
causes fear. Exposure is used predominantly in the treatment of phobic and obsessive–compulsive disorder. The most effective exposure has been shown to be: prolonged rather than short duration;\textsuperscript{20} in real life rather than fantasy;\textsuperscript{21} and regularly practised with self-exposure homework tasks.\textsuperscript{22}

Self-exposure treatment

One of the concerns about exposure treatment has been that it requires considerable professional input to accompany an anxious patient into fear-provoking situations. Fortunately, it has been demonstrated that self-exposure instructions can be all that is required for the treatment of many patients with phobic anxiety and obsessive–compulsive disorder.\textsuperscript{23,24} The efficacy of self-exposure has led to the development of a number of self-help manuals.\textsuperscript{25} However, few patients can read a book and successfully complete a treatment programme without some professional guidance. A professional still needs to educate the patient, help in the devising of treatment targets and see regularly to monitor progress, give encouragement and advise in any difficulties.\textsuperscript{23}

Treatment of agoraphobia with graduated self-exposure

Frances, a 30 year old former secretary, had a 5 year history of fear of travelling alone from home. She was able to visit local shops on foot when accompanied by her 5 year old daughter. If accompanied by her sister, she would travel in a bus but always insisted in sitting close to the door. Train travel was impossible for her. The weekly visit to the supermarket was accomplished by her husband driving her and the pair of them doing the shopping as quickly as possible. If there was a queue at the supermarket checkout, Frances would return to the car while her husband paid for the goods.

The onset of her problems had occurred following the birth of her daughter. Frances had suffered from post-natal depression and had spent 3 months housebound. Once her depression lifted, she had tried to go out but found that she felt extremely anxious, she feared that she might get so anxious that she would collapse. Prior to the onset of agoraphobia, Frances described herself as outgoing and cheerful.

Treatment commenced with the doctor taking a full history of the problem and of her early life and family history. She was then educated about anxiety and its treatment. Firstly, the possible physical and emotional symptoms of anxiety were explained to her. Then it was described how avoidance of feared situations led to further avoidance.

Next she was given the three following rules about exposure treatment.

1. \textit{Anxiety is unpleasant but it does no harm}. It was explained that anxiety does not result in death, serious physical harm or madness.
2. \textit{Anxiety does eventually reduce}. Prolonged exposure to the feared situation results in habituation of the anxiety. This usually takes between one and two hours.
3. \textit{Practice makes perfect}. Regular practice of the exposure task is needed until little anxiety is experienced.

It was then necessary to identify the targets of treatment with Frances. She identified four specific tasks which she would like to be able to perform by the end of treatment and which would demonstrate to both herself and her doctor that she had improved. These were: (1) go to the local park with Amy (daughter) and remain there for an afternoon; (2) travel by bus into town on my own and do some browsing and shopping; (3) drive myself to the supermarket and do the weekly shopping alone; and (4) travel on the bus and train to Manchester to visit my parents.

Frances was then asked to think of a number of tasks which would be stages towards achieving these targets. She was also asked to rate the anxiety that each of the tasks would cause her using a 9-point scale. This anxiety scale has 0 meaning no anxiety, 2 mild anxiety, 4 moderate anxiety, 6 severe anxiety and 8 panic.\textsuperscript{26}

It was decided that it would be easiest for Frances to start treatment by walking in her local area on her own while her daughter was at school. She agreed to go out for at least an hour every day and visit local shops and parks. The details of her exposure tasks were to be recorded in a diary together with a record of her anxiety levels at the beginning, middle and towards the end of the task.

The next week, Frances was delighted with her progress and had found that her anxiety had reduced considerably. She, therefore felt able to progress to the next item on her fear hierarchy. Over the next 12 weeks, Frances managed to achieve all her treatment targets. Throughout this time she was seen weekly. The doctor's input was to praise and encourage her in her progress and to troubleshoot any difficulties.

Her husband, Bob, was able to attend some sessions and was able to assist in some of the exposure tasks. For example, Frances had not travelled on a train for 5 years and was too fearful to travel alone on a train initially. Bob, therefore travelled with her. As her anxiety reduced, he moved to a different part of the carriage. Later he sat in a different carriage and eventually, Frances plucked up the courage to make a train journey alone.

Although Frances progressed extremely well in
treatment, some weeks she was able to see the results of her efforts clearly whereas other weeks there seemed little improvement. The doctor checked the precise way in which she was performing the exposure tasks, ensuring that she was not using any avoidance strategies, such as reading a magazine, but was concentrating on the task in hand.

**Obsessive–compulsive disorder**

Although the exposure is still the cornerstone of treatment for obsessive–compulsive disorder, it needs to be combined with helping the patient not to ritualize. Rituals are overt behaviours or internal thought patterns which are used to counteract the obsessional fears. This can usually be done by demonstrating to the patient how these rituals interfere with exposure and thus prevent habituation occurring.

*Example of self-exposure treatment of obsessive–compulsive disorder*

Mary was an 18 year old girl who had worked as a nanny but was, at the time of referral living with her mother and younger sister. She presented with a 16 month history of fear of contamination by urine and faeces which had led to her losing her job.

The problem had started 3 months after the death of her father and had seemed to be precipitated by her watching a television programme about the risks of hepatitis to health care workers. Following this programme she had become nervous that she might contract and spread hepatitis to other people.

Although she recognized that her fear was exaggerated, she felt unable to prevent herself from taking elaborate precautions to prevent 'contamination'. These precautions included:

1. Washing her hands at least 40 times a day.
2. Bathing for 3 hours nightly.
3. Avoiding touching door handles or other objects which had been handled by people unknown to her or only touching these items using paper tissues.
4. Any clothes which had been worn by her were placed in a plastic bag immediately following removal and were not allowed to come into contact with 'clean' clothes.

Following the assessment of the extent of the problems and educating both Mary and her mother about the rationale of behavioural treatment, Mary agreed to start an exposure programme at home with her mother acting as co-therapist. The targets for the week were that, with the help of her mother, she was to touch her 'dirty' clothes and then systematically 'contaminate' all her clean clothes and to sleep every night in her bed even if she did not feel perfectly clean.

The following week, Mary returned with her mother to report on her success. Initially she had been tearful and very anxious but her mother had been firm but kind and reminded her of the rationale for treatment. Eventually, Mary had appeared more settled and agreed to take the risk of touching her external clothing and then the outside of her wardrobe and chest of drawers where her clean clothes were kept. During this exposure, she was noticeably tremulous and tearful but had managed to continue. Once she had finished this contamination exercise, she agreed to try and touch all her clean clothes. She was surprised to find that her anxiety did reduce as she continued, although she remained concerned that her fear might escalate later. Before completing the session, Mary volunteered to 'contaminate' the bed clothes of her clean bed.

In each subsequent session, Mary continued to progress well in her treatment. She reported that once she had 'taken the plunge' and found that her anxiety did eventually reduce, it was possible for her to continue and increase the difficulty of the exposure tasks. Over the next 6 weeks she practised exposing herself to situations of increasing difficulty, including public lavatories, initially with a total ban on handwashing and bathing and eventually reintroducing 'normal' washing activities. Returning to work as a nanny was her final target which she achieved 2 months after commencing treatment.

**Hypochondriasis and illness behaviour**

Recently, an exciting new theory has developed a model of hypochondriasis or illness behaviour as being similar to obsessive–compulsive disorder. It is suggested that the thought of illness is comparable to an obsessional idea which intrudes on consciousness and leads to increased anxiety.27–29 Instead of the patient trying to reduce this anxiety by rituals, in hypochondriasis, the patient seeks medical reassurance. Each time such reassurance is given, the anxiety reduces a small amount but then doubt creeps in and further reassurance is required. Thus medical reassurance helps to maintain the anxiety in the same way that rituals and reassurance maintain anxiety in obsessive–compulsive disorder.

Using this model it is suggested that treatment should consist of the following components.27–29

1. Education of patient;
2. A ban on medical reassurance;
3. Cognitive restructuring to alter faulty beliefs;
4. Behavioural testing of hypothesis.
Cognitive restructuring is based on the techniques of cognitive therapy described by Beck.\(^{30,31}\) This was first demonstrated to be successful in the treatment of depressive disorder\(^32\) and non-phobic anxiety.\(^{31,33}\) The theory suggests that changes in mood and anxiety are caused by the patient having negative forms of thinking which are called negative automatic thoughts. Treatment involves encouraging the patient to recognize these thoughts and to challenge the validity of them.

Although controlled trials of this approach are currently being performed, uncontrolled work has suggested an encouraging response from the majority of patients, even when treated in groups.\(^34\)

### Post-traumatic phobias (post-traumatic stress disorder)

Recently attention has focused on the prevalence and severity of psychological sequelae following a traumatic life-event or disaster. These patients may often present with a phobia which dates back to the time of the disaster or shortly afterwards. In addition, they often suffer from irritability, tension, startle, depression, insomnia, nightmares and flashbacks as well as fear and avoidance of objects or situations which remind them of the disaster.\(^15\)

Treatment involves graduated exposure to the avoided fear-provoked cues. This often involves fantasy exposure to thinking about the traumatic event itself. This exposure must be sufficiently prolonged to allow anxiety to reduce. As this can be a time-consuming and emotionally testing treatment for the therapist, severe cases are best treated by a specialist behavioural—cognitive psychotherapist. Although case studies suggest a good outcome after treatment for many of these patients, controlled trials have not yet been reported.

### Generalized anxiety

Whereas acute anxiety state following a traumatic life event will generally reduce and abate after a few weeks or months, many patients have chronic problems. Drug treatment may alleviate at least some of the symptoms but there is a real danger of the patient becoming a long-term regular anti-anxiety drug user.\(^35\)

Unfortunately, less is known about the psychological management of generalized anxiety than of the more specific anxieties. There is considerable research in cognitive approaches to this problem but as yet many of the techniques are not readily available to the non-specialist. Practical measures which can be used are discussed in detail elsewhere.\(^13\)

Many of the psychological measures are in their infancy and thus there are relatively few controlled trials on this subject. However, a study by Butler et al.\(^33\) showed that most patients with chronic severe anxiety symptoms were helped by an anxiety management package. There are no studies on the less severe patient.

### Conclusion

Behavioural research over the past 25 years has led to the isolation of the therapeutic components of treatment of phobic and obsessive–compulsive disorder. Self-exposure is cost-effective and requires minimal training of the doctor. Recent research has indicated that exposure methods may have a role in the management of post-traumatic stress disorder and hypochondriasis.

The development of cognitive therapy appears to offer hope in the treatment of generalized anxiety. Unfortunately this is a more time-consuming approach then exposure methods and requires more specialized training.

### References


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