

BEHAVIOUR THERAPY IN PSYCHIATRIC OUTPATIENTS

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ABSTRACT

In a prospective study of fifty consecutive outpatients (30 men and 20 women) attending the Behaviour Therapy Clinic at a general hospital, the commonest conditions were obsessive compulsive disorders (n = 16), phobic disorders (n = 11) and generalised anxiety disorders (n = 9). Three-quarters of the referrals were from psychiatrists and family physicians. The patients received between 2 to 10 sessions of behaviour treatment; most had 4 to 6 sessions with a mean of 4.7, SD 1.82. The commonest behavioural techniques administered were exposure therapy with response prevention and relaxation therapy. Initially, treatment was therapist-aided, but subsequently self-help was encouraged with regular reviews of the patients' homework. After one month, 42 patients (84%) were assessed to have improved somewhat, with 20 (40%) showing moderate improvement. After three months, 41 (82%) continued to improve, with 33 (66%) showing moderate to great improvement. Nine patients were considered to have failed in therapy - six defaulted and three were non-responders. The reasons for defaulting treatment were unwillingness to bear with the discomfort involved in exposure therapy, lack of motivation or returning to own hometown in Malaysia. Sixteen patients (n = 32%) were treated solely with behavioural techniques while the rest had a combination of behaviour therapy and drugs, especially anxiolytics and antidepressants. However, at the end of treatment, the dosages of most medications were reduced or else discontinued completely.

Keywords: behaviour therapy, outpatients, outcome.

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INTRODUCTION

Behaviour therapy refers to psychological treatments which assume the role of learning in the aetiology, maintenance and treatment of some psychiatric problems. Its primary goal is the production of beneficial change in behaviour. The methods used may be based on Pavlovian classical conditioning, Skinnerian operant conditioning, learning principles, experimental psychology, or behavioural sciences in general. Relative to psychodynamic psychotherapy, behaviour therapy focuses on the maladaptive behaviour itself rather than on some presumed underlying cause or unconscious conflict. It concentrates on the here-and-now, and assumes that such behaviour is, to a considerable degree, acquired through learning, the same way that any behaviour is learned. As such, it also assumes that psychological principles (especially learning principles) can be effective in modifying the maladaptive behaviour.

Marks⁽¹⁾ estimated that as many as 10% of adult psychiatric patients are suitable for behaviour therapy. With patients being more psychologically-minded nowadays, as well as a fear of being dependent on medications, especially benzodiazepines, many are willing to participate in the psychological treatment of their conditions. Behaviour therapy has been used to treat anxiety disorders, phobias, obsessions, compulsions, sexual problems, weight disorders, alcoholism, smoking, habit disorders and even the rehabilitation of mentally retarded or chronic institutionalised patients.

The Department of Psychological Medicine, National University Hospital, runs a Behaviour Therapy Clinic for patients

whose conditions may be suitable for behavioural treatment. The management team consists of a psychiatrist (the principal therapist), a psychologist and a social worker. Although there have been many case reports as well as clinical anecdotes on successful outcome with the treatment of psychological and behavioural problems with behaviour therapy^(2,3), there has not been any documented local study in the literature. The objective of this study is to ascertain the effectiveness of behaviour therapy with local patients and the outcome after one and three months of follow-up.

METHOD AND MATERIALS

This is a prospective follow-up study on the first fifty consecutive outpatients assessed to be suitable for behaviour therapy. Information gathered included age, sex, sources of referrals, diagnoses, types of behavioural treatment, drug treatment if any, and the total number of sessions. Outcome was also assessed at one- and three-month follow-up.

Initially, the behaviour techniques employed were often therapist-aided eg modelling in exposure therapy with response prevention. After each therapist-aided session, the patients were encouraged to carry out the behavioural exercises on their own or with a co-therapist (often a family member), record these homework tasks, and review them with the therapist at the next visit in the Clinic. At one- and three-month follow-up, family members were encouraged to accompany the patients to the Clinic so as to report on the in progress. Based on these reports as well as reviews of the patient's homework, the principal therapist would then assess the outcome of the patient's condition. Each patient was asked to rate his/her response to treatment; mild improvement referred to improvement of up to 30% from pre-treatment state in terms of amelioration of symptoms, moderate improvement would correspond to 30 to 60%, and great improvement more than 60% reduction of symptoms. The psychiatrist would also assess the patient's improvement based on the homework records and reports from the family members. If there was any discrepancy between the patient's subjective report of percentage improvement and the psychiatrist's assessment, the lower rating would be taken as outcome to treatment. Most of the therapy sessions were carried out or supervised by the principal therapist (psychiatrist) while the

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psychologist and social worker assisted in relaxation therapy and social skills training.

RESULTS

There were 30 males and 20 females whose ages ranged from 18 to 72 years, mean 32.24 years, SD 12.88 years. Half were less than 30 years old. There was no significant difference between the ages of the men and women. The commonest sources of referrals were from psychiatrists ($n = 18$, 36%) and family physicians/primary health care doctors ($n = 18$, 36%). Patients themselves or their relatives made 7 referrals, a social worker 1, while the last six cases were advised psychiatric treatment by their physicians after excluding organic causes for their conditions.

Table I shows the diagnoses of the patients; obsessive compulsive disorders (OCD), phobic disorders (PhD) and generalised anxiety disorders (GAD) together constituted almost three-quarters of all cases.

Table I – Distribution of cases by diagnosis

Diagnosis	Number	(%)
Obsessive compulsive disorders	16	(32)
Phobic disorders	11	(22)
Generalised anxiety disorder	9	(18)
Habit disorders/tics	6	(12)
Depressive disorders	4	(8)
Panic disorder	2	(4)
Schizophrenia	1	(2)
Exhibitionism	1	(2)
Total	50	(100%)

Table II shows the types of behavioural techniques administered. Relaxation therapy using Jacobson's progressive muscle relaxation was mainly for patients with GAD as well as patients with phobias or tics who also had a fairly high level of free-floating anxiety. Exposure therapy with response was prescribed for phobic patients. Two other phobic patients were treated with systematic desensitisation; while three depressives, one chronic schizophrenic and a social phobic were given social

skills training. The patient with exhibitionism was treated with covert sensitisation. The mean number of sessions were 4.7, SD 1.82. The six patients who defaulted spent an average of only 1.83 sessions, while the rest had 2 to 10 sessions, with 32 receiving 4 to 6 sessions.

As most patients had anxiety disorders - whether OCD, phobias or panic disorder, anxiolytics were prescribed to a third of them. In addition to the four depressed patients, antidepressants, especially the selective serotonin re-uptake inhibitors were adjunct treatment of OCD and panic disorder. Two patients received antipsychotic drugs - one for schizophrenia and the other for multiple tics.

At one-month follow-up, as many as 42 patients (84%) were assessed to have improved somewhat with 20 (40%) showing moderate improvement. Only one patient each suffering from a phobic disorder, GAD and multiple tics disorder reported no improvement; none deteriorated, while five defaulted (Table III).

At three-month follow-up the patient with exhibitionism had stopped treatment because he had returned to Malaysia, while the three patients who did not show any response to treatment earlier remained unimproved. On the other hand, 41 patients (82%) continued to improve, with 33 (66%) showing moderate to great improvement.

DISCUSSION

All behavioural approaches to therapy have as a common aim, the direct modification of observable behaviours which have been identified as in need of change. Yet, such behaviours serve certain functions in their current context, and are often maintained by the events which precede or follow them. These may not be the same factors which gave rise to them in the first place. Behaviour therapy therefore addresses those factors that are seen to be maintaining problems rather than those which may have originally caused them to appear. Neither does it postulate underlying causes, as psychodynamics psychotherapies do, but it regards the observed behaviour itself as the problem.

Prior to 1970, behaviour therapists often worked on laboratory animals or human volunteers with specific phobias (mainly students who would not normally have sought professional help). Moreover, the medical model in the approach of medical illness in search of biological treatment did not

Table II – Distribution of cases by diagnosis and treatment

	OCD n=16	PhD n=11	GAD n=9	DD n=4	PD n=2	SZ n=1	Tics n=6	Exh n=1	Total n=50	(%)
<i>A) Behaviour therapy</i>										
Relaxation therapy	4	9	9	2	2	-	4	-	30	60
Exposure/Response prevention	16	9	-	1	2	-	4	-	32	64
Systematic desensitisation	-	2	-	-	-	-	-	-	2	4
Social skills training	-	1	-	3	-	1	-	-	5	10
Covert sensitisation	-	-	-	-	-	-	-	1	1	2
Habit reversal	-	-	-	-	-	-	3	-	3	6
<i>B) Drugs</i>										
Anxiolytics	4	5	6	1	1	-	-	-	17	34
Antidepressants	12	1	-	4	1	-	-	-	18	36
Antipsychotics	-	-	-	-	-	1	1	-	2	4

OCD: Obsessive compulsive disorders
GAD: Generalised anxiety disorders
DD: Depressive disorders
Exh: Exhibitionism

PhD: Phobic disorders
PD: Panic disorders
SZ: Schizophrenia

Table III – Distribution of cases by diagnosis and outcome at 1 and 3 months

	OCD n=16	PhD n=11	GAD n=9	DD n=4	PD n=2	SZ n=1	Tics n=6	Exh n=1	Total n=50	(%)
<i>Outcome at 1 month</i>										
Defaulted	2	2	-	-	-	-	1	-	5	10
No improvement	-	1	1	1	-	-	-	-	3	6
Mild improvement	6	6	5	1	-	-	2	-	22	44
Moderate improvement	8	2	3	2	2	-	3	-	20	40
Great improvement	-	-	-	-	-	-	-	-	-	-
<i>Outcome at 3 months</i>										
Defaulted	2	2	-	-	-	-	1	1	6	12
No improvement	-	1	1	1	-	-	-	-	3	6
Mild improvement	2	4	1	-	-	1	-	-	8	16
Moderate improvement	6	2	4	1	-	-	-	-	17	34
Great improvement	6	2	3	2	2	-	-	-	16	32

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encourage much clinical applications of behavioural principles with patients. However, over the past two decades, a spate of controlled studies on patients with a variety of psychiatric disorders treated behaviourally have produced favourable outcome. In addition, behaviour therapy is virtually free of significant side effects (other than occasional nightmares and the initial discomfort). Once adequately taught, and should their conditions relapse subsequently, patients can usually continue to apply the same behavioural principles to help themselves, although some assistance from the therapists may be necessary.

Behaviour therapy is not new in Singapore, being widely practised by teachers and mental health professionals in schools, mental institutions and outpatient clinics. In a study of 885 new cases seen at the Child Psychiatric Clinic, Ministry of Health⁽⁴⁾, 6.6% were prescribed behaviour therapy, while as many as 21.6% of 343 new admissions to the psychiatric unit at the National University Hospital⁽⁵⁾ were treated with behaviour therapy. Both studies did not specify the types of behavioural treatment nor the outcome as such.

There is often the clinical impression and apparent assumption that local patients are less keen on psychological treatment (including behaviour therapy) compared to those in the West. This may perhaps be true of the elderly, who were brought up in an atmosphere where open expressions of feelings were frowned upon, if not discouraged. Instead, when they consult a clinician, most elderly would expect a prescription of drugs. However, among the younger population, there is probably a greater acceptance of psychological treatment, as well as a fear of dependence on drugs for any psychological distress. In the present study, which was carried out in a tertiary institution, the commonest sources of referrals were psychiatrists (n = 18, 36%) and family physicians (n = 18, 36%). Our patients (mean age 32.24 years, with half less than 30 years old) were usually already briefed by the referral sources that other than drug treatment, if that at all was necessary, coping strategies in terms of behavioural techniques were to be expected at the Clinic.

In many busy primary health care clinics, it is often considered rather time-consuming to carry out a detailed behavioural analysis, let alone conduct a therapist-aided behavioural programme with patients. The establishment of a Behaviour Therapy Clinic allows colleagues, including psychiatrists, to refer suitable patients for behavioural treatment. In a general psychiatric clinic, one would probably treat many

GAD patients, while patients with OCD and phobic disorders who often required detailed behavioural analysis tended to be referred to our Clinic. Exposure therapy with response prevention and relaxation therapy remain the commonest techniques employed. These are often prescribed for specific fears and free-floating anxiety respectively.

Various outcome studies have consistently confirmed the efficacy of behaviour therapy, especially in OCD and phobic disorders. For instance, in a London study of 40 agoraphobics followed-up after 5 years, 82% remained improved as measured on a global phobia rating⁽⁶⁾. All patients had received exposure therapy plus placebo or imipramine for 26 weeks. Similarly, an American study of 62 agoraphobics after 2 weeks of exposure therapy plus imipramine or placebo reported that two-thirds did well and maintained gains over 2 years⁽⁷⁾. Another London study of 39 OCD patients treated with exposure therapy plus clomipramine or placebo showed that 53% were much improved, 18% improved and 29% unimproved after 2 years⁽⁸⁾. In a review of 9 studies involving 195 out of an original 223 OCD patients followed-up prospectively over 1 to 6 years after exposure therapy, 78% improved and 22% did not improve with respect to obsessive-compulsive symptoms⁽⁹⁾. Usually this improvement generalised to better social adjustment although some residual symptoms were common. In our present study, 2 OCD patients defaulted behavioural treatment while all the 14 OCD patients who were compliant to exposure therapy with response prevention improved somewhat. At 3-month follow-up, 12 were moderately or greatly improved. With regard to the 11 phobic patients, 8 had improved while one (social phobic) remained the same and 3 defaulted (social phobic and flight phobic). These three patients, just like the other two OCD patients who defaulted, found the exposure therapy too anxiety-provoking or else complained about the inconvenience involved. Finally the patient with tic disorder who defaulted, preferred drug treatment alone while the patient with exhibitionism decided to return to his home town in Malaysia before treatment was completed.

Before instituting behaviour therapy for any patient, one should first consider whether the condition is suitable for such treatment. For instance, a focal anxiety as in a fear of contamination with dirt in OCD is usually suitable for exposure therapy, whereas vague, diffused and free-floating anxiety without any particular antecedent which may provoke it, may respond better to relaxation therapy. Secondly, as behaviour

therapy demands time and effort, a commitment on the part of the patient is of paramount importance. Having decided to embark on a behavioural programme as detailed by the therapist, the patient must be determined and disciplined to continue with it, and bear with any discomfort evoked, especially in exposure therapy. If the patient is unable or unwilling to commit himself for behavioural treatment, then it is better to postpone such treatment to a later time than to have a half-hearted attempt, which often only results in the patient sabotaging the treatment programme. Finally, the therapist should exclude relative contraindications to behavioural treatment eg. severe depression or delusional beliefs with regard to the patient's behavioural symptoms. Neither can the therapist expect any ounce of effort or good response to treatment in a suicidal patient.

As in most forms of therapy, there are patients who are non-responders to behaviour therapy. Firstly, it could be due to patient's non-compliance to the behavioural treatment. He/she may not be motivated towards recovery because of secondary gains as a patient (eg attention received in maintaining the sick-role) or else is unwilling to bear with the discomfort of anxiety in exposure therapy. In our study, 9 patients may be considered as failure in therapy — 6 defaulted and 3 were non-responders. In the former, 2 OCD patients and one social phobic complained of the high anxiety evoked in exposure therapy, and refused to continue after 2 or 3 sessions. Another social phobic, an 18-year-old teenager, dropped out half-way in therapy; we suspect her condition was secondarily reinforced by her parent's attention. Unfortunately she was also seen just before her school examination, and that became a legitimate excuse as well. The gentleman with motor tics was only seen twice and complained of work commitment, and thus did not return for subsequent sessions. Finally, as mentioned earlier, the gentleman with exhibitionism returned to Malaysia, so was lost to follow-up. Among the non-responders, one had needle phobia, the second suffered a generalised anxiety disorder (GAD) and the third was depressed with social phobia as well. Needle phobics generally do well with exposure therapy, but this gentleman felt that he could cope better by avoidance. The depression in the social phobic although not severe, could have hindered habituation during behaviour therapy, while the GAD patient just did not feel she was any better in spite of an adequate trial of behaviour therapy. This might be attributed to her already highly anxious premorbid personality.

LIMITATIONS OF OUR STUDY

Very obviously, this descriptive study had no control group. The fairly small numbers of patients in each diagnostic category make it difficult to have a control group. Also, many local patients do expect a prescription of medications from their doctor. Thus, in this study, 16 patients (32%) were treated solely with behavioural techniques, while the rest needed a combination of behaviour therapy and drugs. This makes it difficult to attribute the response to behavioural treatments alone. Anyhow, at the end of treatment, most patients who were on medication had their dosages reduced, or subsequently taken off, especially patients with phobias, GAD, tics and some OCD patients. Finally, because of the heterogeneity of the conditions, it is very difficult to assess response to behaviour treatment using any common rating scale or questionnaire. For instance, the Hospital Anxiety Depression Scale was used in the assessment of the severity of anxiety and depression in patients with GAD and depressive disorder respectively, the Compulsion Checklist for OCD patients, the Fear Questionnaire for phobic patients, and the Social Situation Questionnaire for social anxiety. Attempts to compare improvement based on different rating scales are not meaningful as they are designed to measure different aspects of psychiatric

morbidity. Imperfect though it may be, the authors circumvent this difficulty by considering the over-all improvement with regard to a particular behavioural problem under treatment from reports of the patients and reviews of assigned homework tasks, their relatives, as well as the therapists' own clinical judgement. Should any discrepancy arise between the patient's and the psychiatrist's assessment of the response to treatment, and to avoid over reporting of favourable improvement in the outcome, the authors chose to consider the lower ratings. Finally, it is interesting that during this short follow-up, among the responders, none relapsed. It is left to be seen whether this can be sustained in the long-run.

CONCLUSION

Behaviour therapy is definitely applicable and efficacious in the management of psychological and psychiatric disorders. It is generally easy to understand, and is free from any adverse or long-lasting side effects. Moreover, particular coping skills that are taught and learned, will enhance a sense of self-confidence for the patients. The criticism that behaviour therapy is always time-consuming, and even therapist-dependent may not always be true so long as a detailed behavioural analysis is carried by the therapist, and a comprehensive programme prescribed in collaboration with the patient. This will enhance the latter's active participation and responsibility for his/her own condition. There has been a gradual shift from therapist-aided behavioural treatment towards a more self-help programme⁽¹⁰⁾, which in most patients can be just as effective. In this way, behavioural treatment is recognised not so much as something that is done to patients, but that behavioural methods form a system of self-help techniques. Once the detailed nature of the patient's problem has been carefully unravelled in the course of the interview and clinical assessment, the therapist's role will be that of a mentor or coach in providing guidance to encourage and enhance the patient's own hitherto, latent, repertoire of adaptive behaviours in coping with behavioural difficulties. Finally, any trained staff, not necessarily only doctors, can also administer proper behaviour programmes, although medical conditions may need to be excluded in the first instance.

REFERENCES

1. Marks IM. Behavioural psychotherapy. Maudsley pocket book of clinical management. Bistol: IOP Publishing Limited, 1986.
2. Ko SM. Behavioural approaches to psychiatric disorders. The Singapore Family Physician 1988; XIV: 168-72.
3. Ko SM. Blood-injury phobia. Singapore Med J 1994; 35: 195-7.
4. Ko SM, Goh CW, Tan SK, Chan S. A comparative study of new cases seen at the Child Psychiatric Clinic in 1975 and 1985. Singapore Med J 1989; 30: 553-6.
5. Ko SM, Tsoi WF. New admissions to a psychiatric ward in a general hospital. Ann Acad Med Singapore 1991; 20: 204-7.
6. Lelliott PT, Marks IM, Monteiro WO, Tsakiris F, Noshirvani H. Agoraphobics 5 years after imipramine and exposure, outcome and predictors. J Nerv Mental Dis 1987; 175: 599-605.
7. Mavissakalian M, Michelson L. Two year follow-up of exposure and imipramine treatment of agoraphobia. Am J Psychiatry 1986; 143: 1106-12.
8. Kasvikis Y, Marks IM. Clomipramine, self-exposure and therapist accompanied exposure in OCD. Two years follow-up. J Anxiety Disorder 1988; 2: 291-8.
9. O'Sullivan G, Marks IM. Long-term outcome of phobic and obsessive-compulsive disorders after treatment. In: Noyes R, Roth M, Burrows GD. ed. Handbook of Anxiety, Vol 4: The Treatment of Anxiety. Elsevier Science Publishers B.V, 1990: 87-108.
10. Marks IM. Behavioural psychotherapy in general psychiatry: Helping patients to help themselves. Br J Psychiatry 1987; 150: 593-7.