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Behavioural Psychotherapy of Uncommon Referrals

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Summary: In a behavioural clinic, over a period of nine years, trainee nurse-therapists treated 65 unusual referrals (8 per cent) out of a total of 800 patients. The remainder had phobic, obsessive-compulsive, sexual and social disorders, which responded encouragingly to behavioural treatment. Of the unusual referrals, useful results were obtained by behavioural treatment for stuttering, hairpulling, tics, and writer's cramp; bulimia is worth further study. Unresponsive conditions included compulsive gambling and obesity.

This paper evaluates the outcome of uncommon referrals to a regular behavioural clinic provided by trainee nurse-therapists at the Bethlem and Maudsley Hospitals since 1972. Since that date, over 800 patients have been treated, the majority as out-patients. The unit treats patients who have conditions known from past research to be usually responsive to behavioural psychotherapy. These include phobic and obsessive-compulsive disorders, sexual dysfunction and deviation, and social skills problems, and the encouraging results with such patients in this clinic have been previously described (Marks *et al*, 1977; 1978).

The unit also takes on other cases whose responsivity to behavioural treatment is less well documented; 65 such patients (8 per cent of all referrals) were accepted over eight years. These less common referrals included trichotillomania (hair pulling), tics, writer's cramp, stuttering, compulsive gambling, obesity and bulimia. The outcome of such cases in a regular clinic has not been reported so far—hence the present report.

Method

Patients

All were adults, referred to one consultant (I.M.) at the Maudsley Hospital in 1972–80, treated by trainee nurse-therapists, and followed for up to six months after the end of treatment. No children were seen in the unit.

Measures

During discussions with their therapists, all patients defined the problems they would like to overcome by the end of treatment, and they and their therapists separately rated these problems on a 0–8 scale (0 = 'causes no upset and does not interfere with my normal activities'; 8 = 'causes very severe upset and continuously interferes with my normal activities'). These measures were repeated at the end of treatment, and one month and six months later. Only self-ratings are reported, as they correlated so highly with therapist ratings that the latter contributed little additional information.

Problem ratings by patients have been shown repeatedly to agree highly with ratings by independent psychiatrists, psychologists and nurse-therapists; inter-rater reliability is generally in the range .85–.95 (Marks *et al*, 1977; 1980). In these studies, the value of such problem ratings has been established not only in phobic and obsessive-compulsive disorders, but also in a variety of other neurotic conditions, such as depressive and anxiety neuroses, sexual dysfunction and stammering. In such patients, self-ratings tend to *under*estimate improvement, as compared with ratings by the therapist.

All patients also completed work and leisure adjustment scales and other relevant measures, such as the numbers of daily tics, or of hairs pulled in trichotillomania, and the number of eating binges in bulimia, while therapists measured items like quality of handwriting in writer's cramp and number of speech dysfluencies in stammering. These measures are omitted for brevity, but their agreement with the problem ratings validated the latter as a guide to clinical progress.

Results

Responsive conditions

Tics: In the only controlled study of the behavioural treatment of tics, Azrin *et al* (1980b) treated 22 ticquers with either habit reversal or negative practice. Habit reversal was superior to negative practice, producing a 92 per cent reduction in tic frequency, maintained four weeks after treatment. Five of the ten habit reversal patients were seen at 18-month follow-

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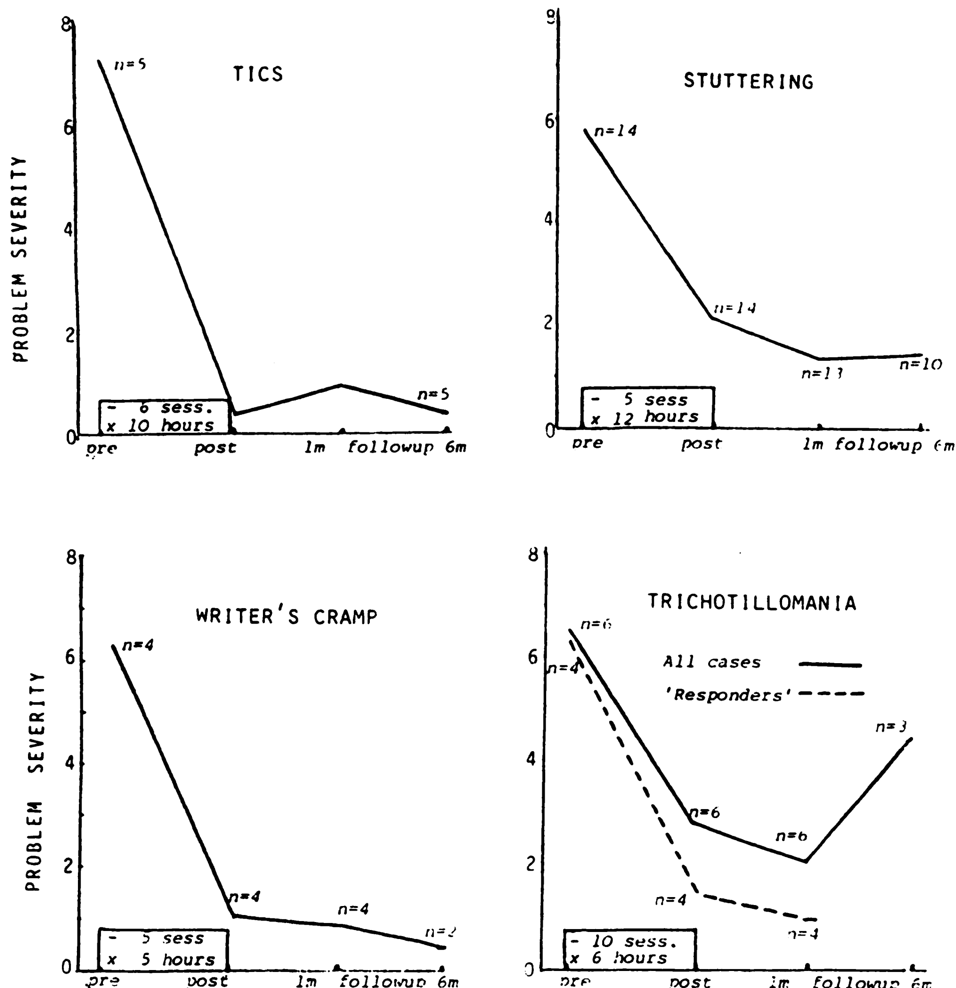

FIG 1.—Responsive conditions; 8 = maximum pathology.

up, and showed a 97 per cent reduction in tic frequency.

In our unit, six patients began treatment, of whom five completed and were seen to six months' follow-up. A variety of treatments were used—relaxation, response cost (the patient records all tic-episodes and pays an agreed forfeit for each episode), and habit reversal. In habit reversal, the patient is taught to tighten the muscles that oppose the tic movement; this is practised in the clinic and daily at home before a mirror, and also before or after the occurrence of a tic for three minutes; in addition, situations where tics are more likely to occur are identified to increase awareness of when a tic may occur; the entire procedure can be taught in one hour. Three cases measured tic frequency daily, another only in the clinic, and one had no tic frequency measures. The encouraging results are combined in Fig 1.

Stuttering: Many treatment methods have been used in stuttering, including assertive training, desensitization, contingency management, metronome, delayed auditory feedback, EMG biofeedback, verse-like scanning, slowed speech and habit reversal.

In our unit, treatment involved habit reversal (Azrin and Nunn, 1974), which increases awareness of stuttering by: (a) listing the situations in which it is likely; (b) keeping a record of all stuttering episodes; and (c) indicating to the therapist during a session whenever he thinks a stutter is about to occur. A response incompatible to stuttering is also taught, so that when a stutter occurs the patient stops and breathes in deeply, and then starts speaking while

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breathing out. Early in treatment, statements are short, and are best formulated prior to speech. Patients role-play speaking in stutter-producing social situations, and are asked to practise this as homework in real social life between sessions. Fifteen patients commenced and 14 completed treatment; 13 were seen to one month and ten to six months' follow-up. Six attended a group, the remainder being treated individually. The combined results are shown in Fig 1. Of the ten patients seen to six months, eight were much improved (by three or more points on the 0–8 scale), one was slightly improved and one was unchanged. All four patients who did not complete follow-up had improved in treatment, and maintained their gains until contact was lost.

Andrews *et al* (1980) recently carried out a meta-analysis of 42 outcome studies, and concluded that prolonged speech and gentle onset were more effective treatment methods than 'air-flow', which included the method which we used. Our outcome measures were too different to allow close comparison, but we concur with Andrews *et al* that 'stuttering therapy is effective'. It is of interest that the average treatment time for the 756 stutterers reviewed by them was 80 hours, compared to only 12 hours in this unit.

Trichotillomania: The largest study of the behavioural treatment of hair pulling (Azrin *et al*, 1980a) compared habit reversal and negative practice in 34 patients, and found that habit reversal was superior. In habit reversal for trichotillomania, the patient: (a) records all urges and acts of hair pulling, to increase his awareness of doing it; (b) learns to identify the situations and actions that lead to hair pulling acts; and (c) learns a competing response, e.g., clenching his hands for three minutes, which is carried out daily, and also when an urge occurs or during or after a hair pulling act. The 18 habit reversal patients had reduced their hair pulling by 90 per cent, four months after a single two-hour treatment session. Eight out of the twelve seen up to 22 months had no further hair pulling.

In our unit, seven patients commenced treatment, of whom six completed and were seen to one month follow-up (three of them to six months' follow-up). Four were treated by response cost, in which the patient records all episodes of hair pulling, and pays an agreed forfeit for each episode. One of these received electrical aversion following relapse (reported in Marks *et al*, 1977). Two were taught habit reversal, which is likely to be the standard technique henceforth.

Results of all six were combined, and are shown in Fig 1. Two of the six completing treatment did not improve at any stage; both of these are among the three seen at six months' follow-up, accounting for the increased combined score at six-month follow-up. The four who responded during treatment maintained their improvement during the one month follow-up available, and their scores are shown separately in Fig 1. The results appear worthwhile, though longer follow-up is desirable; the number of hairs pulled daily corresponded closely with the problem rating.

Writer's cramp: Crisp and Moldofsky (1965) gave psychotherapy and re-education to seven patients, six of whom showed symptomatic improvement during two to four months of treatment, but there were no follow-up data. Bindman and Tibbetts (1977) treated six patients with biofeedback; two maintained definite improvement over three months' follow-up. We are not aware of any controlled studies.

Patients in our clinic were taught habit reversal, which takes a few hours to assess and teach. Five patients commenced treatment, of whom four completed treatment and were seen to one month follow-up; two were seen to six-month follow-up. The results are combined and shown in Fig 1. All four patients improved with treatment, and maintained their improvement during follow-up. The numbers are small, but the results are encouraging; the treatment is short and effective. This is the first presentation of which we are aware concerning outcome of habit reversal in writer's cramp.

Conditions worth further attempts at treatment

Bulimia nervosa: Russell (1979) described a variant of anorexia nervosa in which, in the absence of excessive thinness and amenorrhoea, there were: (a) a morbid fear of becoming fat; (b) recurrent episodes of over-eating (bulimia) which would then be followed by (c) self-induced vomiting or purging. He described 30 cases and noted that the prognosis was poor. Encouraging uncontrolled results of behavioural treatment were reported by Fairburn (1981).

We treated six patients with a behavioural regime for obesity (Stuart, 1967; and see below). Five patients completed out-patient treatment, of whom four showed some improvement which was maintained to one month follow-up. Improvement was limited, in that the patients all continued to have occasional 'binges', but these were less frequent and briefer than before. Two were seen to six months' follow-up (Fig 2).

Useful improvement was obtained, but longer follow-up is necessary to see if it was maintained. The regime for over-eating in obese people emphasizes self-control during eating of all meals, plus regular recording of weight. These features may not be pertinent for bulimic patients, and their urges to eat specific foods in particular situations may require

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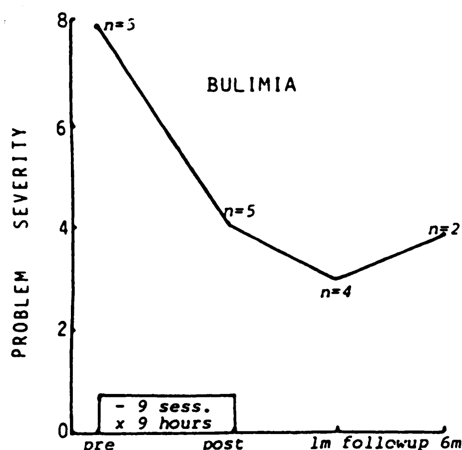

FIG 2.—Outcome of bulimia nervosa cases.

more systematic cue-exposure to achieve controlled eating (Wardle, 1980).

Unresponsive conditions

Compulsive gambling: Little encouragement concerning the outcome of treatment of compulsive gambling is to be found in the literature. In a recent review (Lester, 1980), three of the eight papers summarized were single case studies, one reported three cases, and a further two had no outcome data. Electrical aversion was used for 14 gamblers by Seager (1970); five were still free of relapse when seen between one and three years after treatment. Gamblers Anonymous has existed for 20 years, and although its effects have been described (Scodel, 1964), no outcome data are available. We are not aware of controlled studies.

Our results with compulsive gambling were unimpressive. Treatment involved teaching self-control by visiting betting shops, then walking to the counter, (initially in imagination and later '*in vivo*'), and then resisting the urge to bet, with a rewarding alternative consequence. When it was harder to resist, the introduction of an unpleasant image (covert sensitization) or snapping a rubber band were also used. All had concurrent marital problems, for which treatment was offered but not always accepted; the partners were usually asked to assist in treatment. Seven men started treatment, five completed it, and of the two seen for six months' follow-up, one was gambling regularly and the other was alternating between binges of gambling and alcohol abuse. Three had reduced their gambling when last seen, but did not attend for follow-up.

Obesity: There are over thirty controlled trials, demonstrating that behavioural methods can reduce weight to some extent (Stunkard and Penick, 1979), though gains are not always maintained at follow-up. Stunkard and Penick followed up 27 patients five years after treatment, at which time only seven weighed less than at the end of treatment. Furthermore, in nine studies with one to two years' follow-up, the weight loss at follow-up was so small (3–8 kg) as to be clinically insignificant.

In our cases, the treatment was based on the method of Stuart (1967) including: (1) regular record keeping of weight and food intake; (2) stimulus control, involving restricting the cues for eating, e.g., only keeping food in the kitchen, never buying ready-made foods; (3) eating at a slower rate, by having fixed interruptions during a meal, putting a small amount on the spoon, and putting the utensils down between mouthfuls; and (4) rewards for completing 1, 2 and 3.

Of seven obese patients who entered treatment in our clinic, three did not complete treatment, three completed but were not seen for follow-up, and only one was seen for six-month follow-up. Only three had made (limited) gains when last seen; our overall results were thus unencouraging.

Our patients often had concurrent problems, which may have made them more difficult to treat than those in self-help groups. Four of the seven were concurrently being treated for psychiatric problems—one was schizophrenic, another hypomanic, and two were depressed, one of whom had had a leucotomy in the past.

Very uncommon referrals

Two adult self-mutilators, two shop lifters, two nocturnal enuretics and one typist's cramp did not complete treatment. Two patients were treated for problems of anger control, using techniques similar to Novaco (1976); one had no outbursts during six months' follow-up, the other refused to attend the final session and was not seen for follow-up. One case each of scab-picking and scratching improved. One case of recurrent belching did not improve with negative practice.

Discussion

The small numbers and necessarily uncontrolled nature of this report must make any conclusions tentative. In the four responsive conditions, 20 patients were available for six months' follow-up, at which point 16 patients were much improved and one slightly improved. The results on stuttering were encouraging, especially as the treatment hours were far fewer than with other approaches; however, the absence of measures in social settings is a limitation. Patients with tics did well, though methods and measures were diverse. Treatment of writer's cramp by habit reversal was successful; this method has hitherto

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only been applied to other habit disorders. The results of treatment of trichotillomania were not unpromising, and future results with habit reversal are awaited.

Outcome was poor in the few patients treated for compulsive gambling. Patients treated for obesity often dropped out, and those who remained showed little loss of weight.

How commonly are these problems treated? The 65 cases discussed represent 8 per cent of the 800 patients treated and followed up in the department in 1972–80. Maudsley trained nurse-therapists now working in other areas of England (and one in Eire) have treated a total of 1040 patients, only 57 of whom were from the unusual categories studied (with the exception of obesity, bulimia and gambling, which were not enquired after). This is 5½ per cent of their case-load, i.e., not dissimilar to the Maudsley figure.

In most psychiatric patients, not only behavioural ones, it is possible to formulate their problem(s) in a single statement(s), and the severity of the condition can be rated at intervals (Ryback *et al*, 1981). In neurotic patients, such problem ratings are generally a useful guide to clinical progress, and usually agree well with other evidence. Ratings of problem severity can easily be made before and after treatment, and at follow-up, as in our unit. While it is not possible to compare our results with the research studies mentioned without comparing other variables such as age, sex and symptom duration, some idea can be gauged from problem ratings whether a particular treatment is worthwhile for given problems under routine as opposed to research conditions.

Conclusions

The small numbers of patients who received behavioural treatment for tics, writer's cramp, stuttering and trichotillomania responded well up to the follow-up period available of one to six months. Similar small numbers treated for compulsive gambling and obesity had a poor outcome; the outcome of bulimia requires more study. All these conditions together constituted only 8 per cent of the behavioural caseload over nine years.

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