# OBSESSIVE COMPULSIVE NEUROSIS: TREATMENT OF 28 CASES BY BEHAVIOUR THERAPY

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#### SUMMARY

Twenty-eight cases of obsessive compulsive neurosis were treated with a behaviour therapy package and good results were obtained in 15 (53.6%). Relaxation, thought-stopping, implosion, modelling, response prevention, electrical aversion and positive reinforcement were the techniques employed. Chronicity, previous treatments, follow-up data, drop-outs and the use of behaviour therapy in our setting are discussed in this paper.

The chronicity of obsessive compulsive neurosis and its refractoriness to treatment have been well documented (Pollitt, 1957; Grimshaw, 1965; Rado, 1960). Over the last two decades various techniques of behaviour therapy have been evolved to deal with this condition. Taylor (1963), Stern (1970) and Meyer (1966) initiated the use of thought-stopping and response prevention. (1975) treated cases with systematic desensitization and achieved good results. Faradic current was used to disrupt obsessive ideation by Kenny and Solyom (1973). Response prevention (Apotrepic therapy), in the beginning, was a relatively vigorous effort carried out on inpatients (Meyer, 1966; Meyer and Levy 1970; Mills et al, 1973). obsessive ruminations were treated by the thoughtstopping procedure (Stern et al, 1973; Kumar and Wilkinson, 1971; and Stern, 1970). Flooding in vivo along with modelling is being advocated now as it produces rapid and better results (Hodgson et al, 1972; Rachman et al, 1971; Marks et al, 1975; Marks, 1976). Relaxation to some behaviour therapists appears superfluous and could be abandoned as an ingredient in the treatment of obsessive compulsive neurosis. Flooding in imagination is not a very popular tecnique according to Marks' (1973) review on this subject.

In India, Bagadia et al (1980) and Nammalvar and Venkoba Rao (1983) have reported on the treatment of obsessive neurosis by behaviour therapy. This paper presents a study of 28 cases of obsessive compulsive neurosis treated by behaviour modification techniques.

#### MATERIAL AND METHODS

Our sample of 28 patients attending the psychiatric out-patient department of the K. E. M. Hospital, Bombay, were

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examined and diagnosed by two consultant psychiatrists independently as suffering from obsessive compulsive neurosis. At our behaviour therapy clinic a detailed psychiatric history was obtained and a psychiatric and physical examination was done by a research worker. In addition social data was obtained, psychometry was done and polygraph recording was obtained. In this paper only the treatment aspects are discussed.

During a group discussion on the obsessions and compulsions and their aggravating and relieving factors, a behabiour therapy strategy was worked out.

## Techniques of behaviour therapy employed

a. Deep muscle relaxation (Modified Jacobson's technique), b. Thought-stopping, c. Implosion (Flooding in imagination), d. Modelling, e. Response prevention, f. Electrical aversion, g. Positive reinforcement.

# Parameters of assessment of improvement:

Hamilton Anxiety Rating Scale, the Rorschach Ink-Blot test and the Minnesotta Multiphasic Personality Inventory failed to reflect the clinical condition of the patient initially and proved to be poor measures of improvement or failure on readministration, in our first ten cases. We however, continued the use of these tests for clinical evaluation but abandoned them as measures of improvement. Polygraphic measures of anxiety also proved to be poorly correlated both with the initial clinical condition and the later success or failure of treatment in our first few cases and hence was subsequently discontinued.

In assessing change produced by treatment, a) the patient's subjective impression, b) relative's objective verification and c) the therapist's observations were taken into account. A quantitative measure for rating the severity of symptoms, in terms of time lost during the day was worked out as follows—

(Approx. Frequency) × (average duration of symptom (e.g. hand-washing, checking, doubts)) = time spent % improvement = 100

$$-\frac{\text{Time spent at present}}{\text{Time spent at baseline}} \times \frac{100}{1}$$

The results were classified as follows—

## RESULTS AND DISCUSSION

As seen in table 1 and 2, very good improvement was obtained in 15 (53.6%) of 28 patients treated by behaviour therapy. If the 8 patients considered to be drop-outs are excluded then the favourable result are seen in 75%

TABLE 1. No. of sessions vs. improvement

No. of sessions	No. of pati- ents	Drop outs	Good 76—	Good 51 75%	26	0—
10 & less	5	5	0	υ	0	- <b></b> -
11-20	10	2	4	3	0	3
3140	6	1	3	1	ø	2
31-40	4	0	1	1	1	1
4160	3	0	2	0	0	1
	28	8	10	<u></u>	<u> </u>	12

In those cases in which there were more than one symptom, the minutes lost were added together. Comparing the time thus lost as treatment progressed with scores at baseline, a quantification of improvement was possible in terms of percentage.

TABLE 2. Duration of illness vs. improvement

	No. of patie- ents	Drop outs	good	Good		Poor
			100%	76%	50%	25%
t year and less		3	4	. 1	0	3
Upto 2 years	9	3	4	2	0	3
Upto 4 years	3	1	0	1	0	2
Upto 9 years	. 0	0	0	0	0	0
10—19 years.	. 5	1	0	1	- 1	3
20-30 years.	3	0	2	0	0	ι
<del></del>	28	8	10	5	1	12

(15 out of 20 patients). If the 5 patients taking less than 10 sessions are deemed to have taken inadequate treatment then the favourable result perecentage is 65.2% (15 out of 23 patients). Nammalvar and Venkoba Rao (1983) have obtained 65% (11 out of 17 cases) results with thought stopping and relaxation. Marks et al (1975) found 14 (70%) of 20 patients to be much improved at the end of 2 years using exposure in vivo.

They had no drop-outs. Our series of 28 well documented, well followed-up cases is quite a large one for a condition like obsessive compulsive neurosis and the number of chronic cases in our series too has been considerable. Hence results with smaller groups with shorter duration of illness are not necessarily comparable.

Chronicity and improvement: (See Table 2).

Our sample included 8 (29%) cases who were suffering from obsessive compulsive neurosis for 10-30 years. Of these 3 (37.5%) showed very good/good improvement and 1 (12.5%) improved fairly. 7 (58%) of 12 patients who had a duration of illness between 1 and 4 years showed very good/good improve-

ment. This demonstrates the value of behaviour therapy in the most chronic and well-established cases. The improvement in these cases was maintained over a long period. Chronicity implies that vigerous and prolonged treatment is indicated as has been observed by Rachman et al. (1971) and Hodgsen et al. (1972).

No. of sessions and improvement:

Though we consider anything less than 20 sessions to be inadequate in the treatment of obsessive compulsive neurosis, 7 (46.6%) out of 15 patients who took 20 sessions or less have shown very good/good improvement. These patients who improved had all an illness of less than 2 years duration. For those with a larger duration more sessions seem to be needed. We advocate a minimum of 20 sessions for obsessive compulsive neurosis with 40-50 sessions over a period of two months in very chronic cases.

## Gomparison with other treatments:

26 of our 28 patients had received prior treatment with pharmacological agents of various kinds for their illness and had not benefited by them. Antipsychotics, antidepressants and anti-anxiety drugs had proved equally unsuccessful in relieving the symptoms. In 15 (53.6%) of 28 cases, ECT too had proved ineffective. In 13 cases psychotehrapy, psychoanalysis, and social case work had proved to be failures in symptom-relief.

Patients themselves compared the good results with behaviour therapy with the failure of the other treatments. Thus an intra-patient comparison of treatments brings out the superiority of behaviour modification techniques in the symptom-relief of obsessive compulsive neurosis. Marks (1976 and 1981) in his recent overviews has stressed the same point.

We have employed well-known behaviour therapy techniques in combination. Marks advocates exposure in vivo (1973, 1976, 1981) as the single most effective procedure and the role of relaxation has been questioned by many. Nammalvar and Venkoba Rao (1983) achieved 65% (11 out of 17) results with thought stopping and relaxation. Our view is that in the out-patient clinical setting the anxiety evoking techniques are not immediately acceptable to patients from our sociocultural milieu and therefore a gradual exposure to the different treatments after winning the confidence of the patient is essential. Behaviour therapy too has too be tailored to suit the patient and the prime consideration in selection of techniques should be the ability of the patient to use and benefit from them with this rationale we used a combination of techniques and recommend it as likely to be of benefit to the greater majority and more acceptable in Indian conditions.

## Follow-up:

In 20 out of 28 patients regular follow-up could be maintained by using postal reminders. Only 4 (27%) of 15 patients showing good/very good improvement relapsed. of these two were treated again with behaviour therapy and improvement restored. In the fifth patient the degree of improvement came down to 50%. In the rest the results were maintained. Though the period of follow-up has varied from 2 years to 4 months in these cases, it is observed that effects of behaviour therapy are lasting and no patient deteriorates immediately after stopping treatment. In chronic cases relapses are not unexpected, several factors contribute to it and additional behaviour therapy sessions prove rapidly effective.

### Drop-outs:

8 patients dropped-out of treatment, of these 5 took less than 10 sessions, 2

less than 20, and one was a treatment-failure even after taking 30 sessions. Inability to attend the behaviour therapy clinic regularly was the cause of 3 clearly drop-outs, the fourth was distressed by the flooding in imagination technique, and in the fifth case who took less than 10 session no reason could be ascribed. In the other three lack of improvement after taking 16, 16 and 30 sessions respectively was the reason for dropping out. In the patient who became afraid of the implosion technique, the drop-out was possibly preventable by the use of other techniques.

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#### REFERENCES

BAGADIA, V. N., SHAH, L. P., PRADHAN, P. V. (1980). Behaviour Therapy in Indian setting. In: Advances in Internal Medicine. (Ed.) Patel J. C., Shah N. J. and Singhvi P. Popular Prakashan, Bombay. p, 433.

GRIMSHAW, L. (1965). The outcome of Obsessional Disorder: Follow up study of 100 cases. Brit. J. Psychiat., 111, 1051.

Hodgson, R., Rachman, S. and Marks, I. M. (1972). The Treatment of Chronic Obsessive Compulsive Neurosis: Follow up and further findings. Behav. Res. and Ther., 10, 181.

KENNY, F. T., SOLYAM, C. (1973). Faradic disuption of obsessive ideation in the treatment of Obsessive Neurosis. Behav. Ther. 4, 448.

KUMAR, K, AND WILKINSON, J. C. M. (1971). Thought stopping: A useful treatment for phobias of Internal stimuli. Brit. J. Psychiat., 119, 305.

Marks, I. M. (1973). New Approaches to the treatment of Obsessive Compulsive Disorders. J. Nerv. Ment. Dis.. 156, 420.

MARKS, I. M., HODGSON, R., AND RAGHMAN, S. (1975). Treatment of chronic obsessive compulsive neurosis by in vivo exposure: A two year follow up and issues in treatment. Brit. J. Psychiat., 127, 349.

- MARKS, I. M. (1976). The current status of Behavioural Psychotherapy: Theory and Practice. Amer. J. Psychiat., 133, 253.
- MARKS, I. M. (1931). Psychiatry and Behavioural psychotherapy. Brit. J. Psychiat., 139, 74.
- MEYER, V. (1966). Modification of expectation cases with obsessional rituals, Behav. Res. Ther., 4, 273.
- MEYER, V. AND LEVY, R. C. (1970). Behavioural treatment of a homosexual with compulsive rituals. Brit. J. Med. Psychol., 43, 63.
- MILLS, H. L., AGRAS, W. S., BARLOW, D. H., AND MILLS, J. R. (1973). Compulsive rituals treated by Response Prevention. Arch. Gen. Psychiat., 28, 524.
- Nammalvar, N., Venkoba Rao A. (1983). Obsessive compelsive behaviours—a therapeutic study with thought stopping procedure. Indian J. Psychiat. 25 (i), 52.
- POLLIT, J. (1957). Natural History of Obsessiad

- states. A study of 150 cases. Brit. Med. J., 113, 405.
- RAGMAN, S., HODGSON, R. AND MARKS, I. M. (1971). Treatment of Chronic Obsessive Compulsive Neurosis. Behav. Res. & Ther., 9, 237.
- RADO, S. (1960). Obsessive Behaviour. In: American Hand-book of Psychiatry. Basic Books Inc., New York, p. 343.
- STERN, R. (1970). Treatment of a case of obsessional neurosis using thought-stopping technique. Beit. J. Psychiat., 117, 441.
- STERN, R., LIPSEDGE, M. S. AND MARKS, I. M. (1973). Obsessive reminations: A controlled trial of thought-stopping technique. Behav. Res. & Ther., 11, 659.
- TAYLOR, J. G. (1963). A behavioural interpretation of obsessive compulsive neurosis. Behav. Res. & Ther., 1, 237.
- WOLPE, J. (1975). The practice of behaviour therapy. Pergaman Press Inc., New York.