Long-term follow-up of patients suffering from obsessive-compulsive disorder treated as in-patients

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Few patients with obsessive-compulsive disorder (OCD) require in-patient treatment. There is sparse information on outcome of OCD patients treated as in-patients. This paper is a descriptive account of the current functioning of 54 OCD patients treated in hospital, on average 10 years prior to the study. Follow-up reveals that outcome for the majority of patients is poor with 29 (59%) of the sample showing at least mild symptomatology or some difficulty in several areas of functioning.

Keywords: Follow-up – In-patient treatment – Obsessive-compulsive disorder

INTRODUCTION

In serious cases, obsessive-compulsive disorder (OCD) is a crippling disorder which may be characterized by long-term persistence of disabling symptoms and resistance to treatment. Cases of OCD of sufficient severity to warrant in-patient treatment are relatively rare. Current estimates suggest that OCD accounts for 1-4% of all psychiatric patients (Rasmussen and Tsuang, 1984). The lifetime prevalence of OCD in the general population has been estimated to be 1.7% using DSM-III criteria (Karno et al., 1988).

The long-term prognosis for severe cases of OCD is unclear. There is a paucity of long-term follow-up data of OCD patients with severe symptoms treated as hospital in-patients. Retrospective studies have been used as a means of gathering follow-up samples of sufficient size to be useful (Muller, 1957; Hastings, 1958; Ingram, 1961; Kringle, 1965; Greer and Cawley, 1966; Noreik, 1970). These studies are disadvantaged by the lack of standardized data collected at the time of admission and are also susceptible to changes in diagnostic criteria.

Some prospective treatment outcome trials have been reported (Kaskivikis and Marks, 1988; O'Sullivan et al., 1991; Drummond, 1993) which suggest that modern treatment strategies (e.g. clomipramine and exposure therapy) can be effective and that improvement is maintained at follow-up of a few years. O'Sullivan et al. (1991) reported a 6 year follow-up of 43 in-patients treated with exposure therapy with or without clomipramine. The group maintained significant improvement in OCD symptomatology, social adjustment and depression but returned to pre-treatment levels of anxiety. However, few patients were symptom-free at follow-up and 61% were maintained on medication. A prospective design gives the advantage of a comparison between pre- and post-treatment assessments but the sample size is small, and the length of follow-up is relatively short. The inclusion of a control non-treatment or out-patient group in future prospective studies will help to elucidate the role of the in-patient element of treatment.

Recent retrospective studies have also failed to report a significant improvement in long-term outcome of OCD sufferers who received in-patient care. Berrios and Chiu (1989) conducted a retrospective follow-up of 42 OCD subjects who received in-patient treatment. They found that about half of their subjects were ill at follow-up. Allsopp and Verduyn (1988) in a retrospective follow-up of adolescents who received in-patient treatment for OCD, found half of their sample still symptomatic at follow-up. However the majority were functioning sufficiently well to have entered further education or employment.
The present study was undertaken to evaluate the long-term prognosis of patients suffering from OCD of sufficient severity to warrant in-patient treatment. The aims of the study were limited to those which could be realistically achieved within a retrospective design: assessment of quality of life and current symptomatology of patients at long-term follow-up.

METHODS

Case selection
A complete list of all in-patients discharged from the Royal Edinburgh Hospital with a diagnosis of OCD over a 20 year period (1969–1989) was obtained. One hundred and thirty-six case notes were traced.

Patients were included in the study population if they fulfilled the following criteria:
(1) Discharged from the Royal Edinburgh Hospital with a primary diagnosis of OCD between July 1969 and July 1989.
(2) Not less than 18 years or over 60 years of age at the time of follow-up.
(3) The case notes of the subjects provided sufficient evidence to confirm the diagnosis of OCD using DSM-III-R (American Psychiatric Association, 1987). Evidence of resistance was not used as an inclusion criterion since few patients had resistance documented as a symptom, and Stern and Cobb (1978) have suggested that resistance is not an essential component of OCD.
(4) At the time of the most recent discharge the subject provided an address within the United Kingdom.

Any subject whose case notes were insufficiently detailed to confirm a diagnosis of OCD was eliminated. In most of these instances, the case notes suggested no diagnosis other than OCD, but as the sample of possible subjects was large, strict diagnostic criteria were employed to ensure a homogeneous sample.

Seventy-four patients of the 136 case notes traced fulfilled the above criteria.

Contact and assessment of present functioning
Permission to contact the subject was obtained from their general practitioner (or hospital clinician if currently engaged in treatment). The current general practitioner or hospital clinician was requested to give an assessment of the subject's present level of functioning using the Global Assessment Scale (GAS; Endicott et al., 1976). Subjects were then sent a letter inviting them to participate in the study. If they agreed, they were mailed a package of questionnaires.

Postal questionnaires. The postal questionnaires included the following:
(1) Mood state: Beck Depression Inventory (BDI; Beck et al., 1961) and Spielberger State Trait Anxiety Inventory (STAI; Spielberger et al., 1979).
(2) Obsessional symptoms: Leyton Obsessional Inventory (LOI; Cooper, 1970) modified for group use (Kazarian et al., 1977). Information was also requested concerning the subjects' perception of the course of their illness and current medication.
(3) Social and occupational functioning: a questionnaire was constructed for the present study based on the Social Functioning Schedule (SFS; Remington and Tyrer, 1979).

RESULTS

Total sample
Seventy-four subjects reached the inclusion criteria for the study: 34 males and 40 females. Five subjects were known to be dead: of these two were definite suicides and two were probable suicides (both involving alcohol). The average age at follow-up (i.e. excluding those known to be dead, \( n = 69 \)) was 36.8 (S.D. 8.8) years.

The average age at first admission was 24.7 (S.D. 9.8) years. Inspection of the case notes indicated that since the index admission, 12 subjects had a subsequent admission with a diagnosis of depressive illness, five subjects had required in-patient treatment with a diagnosis of anorexia and only one subject had a subsequent admission with a diagnosis of schizophrenia. Nine patients had had a further admission for OCD.

At the completion of the search 49 subjects had been located (the traced group), five were known to be dead, and 20 subjects were lost to follow-up. Some information was obtained for all 49 located subjects although it was not possible to obtain standardized information in all cases. Questionnaires were completed by 29 subjects (contacted group), 17 of whom were also interviewed.

Traced group
The average age of the subjects in this group was 36.0 (S.D. 9.8) years. The average age at first admission was 27.0 (S.D. 8.6) years. On these indices there was no significant difference between the traced group (\( n = 49 \)) and the subjects known to be dead (\( n = 5 \)) or otherwise lost to follow-up (\( n = 20 \)).
The general practitioners' assessments using the GAS provided a mean score of 60.5 (S.D. 16.0, range 15-90), suggesting a level of global functioning for the traced group of mild to moderate symptoms and some difficulty in general functioning. Thirteen (26.5%) of the group had a GAS rating at or below 50 which suggests that over one-quarter of the sample continued to be seriously disabled by their symptomatology.

Information about subjects' current treatment status was incomplete. However four of the traced group were known to be currently engaged in in-patient treatment, and a further 10 (a total of 26%) were engaged in out-patient treatment. A further eight (16%) were known to be taking prescribed psychotropic medication and were not receiving behavioural treatment.

Contacted group
The average age of this group was 38.1 (S.D. 10.9) years. The average age at onset of OCD was 19 (S.D. 8.8) years. Subjects' reports indicated that an average of approximately 5 years elapsed before medical help was sought, and in this sample an average of a further 5 years elapsed before in-patient treatment was initiated.

Mood state. The contacted group (n = 29) had a mean score of 12.5 on the BDI. Forty-six per cent scored above the cut-off score of 14 quoted as the mean for a mildly depressed population (Metcalfe and Goldman, 1965). The mean score on the STAI-S was 48.4 (S.D. 12.4), well above the quoted norms for the general population (Knight et al., 1983).

Obsessional symptoms. The subjects in the contacted group rated their obsessional symptoms with the LOI, and the results are shown in Table I. The mean symptom scale score for the contacted group was significantly lower than that of the currently obsessional population tested by Cooper (1970) (t = 4.11, df 46, p < 0.01). The scores of the contacted group were not significantly different from Cooper's population on the scales of resistance and interference. This suggests that although the symptomatic level of the contacted group is lower than that of Cooper's population, they still suffer from similarly high levels of resistance and interference. This may be an important indicator of poor outcome since reduction of interference score has been suggested as the most important single predictor of feeling "better" (Berrios and Chiu, 1989). However the wide ranges of scores on all three scales indicate that there is considerable variation in the extent of obsessional symptomatology within the group.

Half of the contacted group (n = 29) reported a fluctuating course of illness without any general trend towards improvement or deterioration. A further 13% had experienced a generally deteriorating course and over 30% had experienced a generally improving course.

Social functioning. Only half of the contacted group had been employed within the 6 months prior to follow-up. Ten subjects (34.5%) had been prevented from working due to their mental health. Eleven subjects (37.9%) reported varying degrees of difficulty with self care.

At follow-up 19 subjects (65.5%) reported being in a steady relationship, 17 (58.6%) being married. However, less than half of these subjects reported no difficulty in interpersonal relationships. Seven subjects (24.1%) lived alone. Thirteen (44.8%) had children, and none of these reported any difficulty in caring, or feeling affection for their children. Eight (27.4%) reported frequent or major difficulties in the relationship with their parents. Twenty-six subjects (89.7%) reported having at least one close friend, and all reported having at least a few acquaintances. However nearly all experienced feelings of loneliness. Almost all reported at least one interest or hobby, but only 11 (37.9%) said they had no difficulty filling their time and were never bored.

In summary, the follow-up data for 54 out of 74 of the total sample indicated a mean level of functioning within the range of mild to moderate symptoms and some difficulty in general functioning according to the GAS. More detailed data available for 29 out of 74 of the total sample indicate mild levels of anxiety and depression. In addition those contacted endorsed a significant degree of obsessional symptomatology and reported levels of resistance and interference consistent with those of a currently obsessional popu-
Most of the subjects had been able to form close relationships although these were not without difficulty.

**DISCUSSION**

The retrospective design of this study allowed a large sample of in-patient OCD cases to be examined \( (n = 136) \). This is particularly important since severe OCD is rare and many previous studies are based on small samples. The large number of cases treated within the admission period allowed rigorous application of diagnostic criteria, reducing the sample size to 74. This enabled examination of a reasonably large sample.

The results of this study support the conclusions of previous work which has indicated poor prognosis for sufferers of OCD of sufficient severity to warrant in-patient treatment. At 10 year follow-up only one-third of the contacted subjects in this study were not receiving either behavioural treatment or medication. One-third of the group were unable to work as a consequence of their symptomatology, and the group as a whole continued to suffer from a severe level of obsessional symptomatology. The LOI interference scale scores indicate that the group continued to experience a severe level of discomfort as a result of their symptoms.

Despite the large sample \( (n = 74) \) included in the study the number of subjects who completed questionnaires \( (n = 29) \) represented a minority of the sample and may not present a representative picture of the current functioning of the group as a whole. Nonetheless, the GAS ratings and non-standardized follow-up information available in addition to the questionnaire and interview data, with a follow-up rate of 54 out of 74 (73%), provides a broad, more complete view of outcome for this group of patients.

The retrospective design has provided the opportunity to examine a large sample of OCD in-patients. Although a retrospective design makes it difficult to be confident about the nature of the sample studied and the extent to which it may be representative of an OCD in-patient population as a whole, it is suggested that the results of the present study reflect the outcome of OCD patients treated as in-patients due to the severity of their illness. However it remains possible that some admissions were not warranted by OCD symptom severity alone, but by additional problems such as depressive symptomatology and suicidal ideation. Nevertheless, the rigorous application of the inclusion criteria in the present study sought to minimize this possibility by including only those patients whose primary diagnosis at index episode was OCD.

The additional psychopathology documented amongst the total sample \( (n = 74) \) reflected in the range of diagnoses applied subsequent to the index episode, suggests that this group of patients may exhibit, over time, a broad spectrum of neurotic rather than psychotic disorders. Particularly notable is the risk of suicide. However, despite poor outcome in terms of psychopathology, many subjects have been able to form some close personal relationships although these are often impaired. This concurs with recent observations by Emmelkamp et al. (1990), who found that nearly half of their out-patient OCD patients reported marital difficulties.

This study found that OCD sufferers treated as in-patients reported a chronic course of illness. The present study reports no details of the treatment offered to patients, either on an out-patient or in-patient basis, other than that the sample had received an average of 5 years of out-patient contact prior to admission, which occurred on average approximately 10 years after the onset of the disorder. The nature of treatment offered would be expected to have influenced the outcome of these cases. Unfortunately however the case notes contained insufficient detail to report treatment received with any accuracy. Surprisingly, a course of intensive specialist behavioural treatment had not been offered in all cases. Recent developments in treatment indicate that intensive treatment including an in-patient exposure programme is helpful in the treatment of severe OCD (Drummond, 1993). It may be that this sample had not received what might now be considered optimal treatment (Abel, 1993; Cox et al., 1993) during their in-patient stay. This leaves some uncertainty as to whether the poor functioning of the sample at follow-up reflects inadequate treatment, or a chronic and resistant disorder.

It is likely that those patients who finally reach in-patient treatment constitute a distinct group within the population of OCD patients. A more succinct profile of these patients is required in order to distinguish between those who are likely to respond to out-patient treatment and those with a more chronic course who may benefit from in-patient treatment. It has been suggested that a subgroup of OCD patients may be described as suffering from “OCD with psychotic features” (Insel and Akiskal, 1986). This group of patients have obsessional beliefs which reach near-delusional proportions. These patients consider their beliefs to be rational, and rather than being resisted, rituals are embraced. This is likely to result in greater chronicity and the outcome for a small group of such patients has been reported to be very poor (Fenton and McGlashan, 1990). Perhaps such patients
account for a disproportionate number of those who reach in-patient treatment and this might account for the poor prognosis reported for these groups (Allsopp and Verduyn, 1988; Berrios and Chiu, 1989). It might also account for the lack of documented evidence of resistance in the case notes of the sample examined in this study.

The in-patient OCD population, although making up a small proportion of the whole in-patient population, utilizes a disproportionate amount of the available hospital resources as many admissions are particularly lengthy. Other studies have demonstrated the efficacy of intensive behavioural therapies within in-patient settings (e.g. O'Sullivan et al., 1991; Drummond, 1993). The results of this study indicate that despite in-patient treatment, the majority of the sample continued to experience significant difficulty at follow-up.

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