

A SINGAPORE STUDY OF OBSESSIVE COMPULSIVE DISORDER

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ABSTRACT

This is a study of 283 consecutive patients diagnosed as suffering from obsessive compulsive disorder (OCD) who had sought treatment in a private psychiatric clinic. This represents 4.5% of all patients treated in the clinic.

Ninety-four percent were Chinese, 3% were Indians and 0.4% were Malays. The mean age of onset of illness was 27, SD 11.9. Fifty-one percent of patients developed their illness prior to age 25. There were more male than female patients. The male to female ratio was 1.4:1. A high percentage of patients had attained higher educational level and were economically active.

The main forms of the obsession were idea, impulse and image; and the main contents were contamination, illness, aggression, exactness, sex, death and religion. The main compulsions were cleaning, checking, repetitive behaviour, need for symmetry and precision and hoarding.

The co-morbidity diagnoses were depressive, general anxiety, phobia, panic and psychotic disorder.

In the patients who were followed-up for more than one year, it was found that 78% improved with treatment given. However, 22% remained unwell or deteriorated. In this series, it was noted that 17% of patients were severely incapacitated by the illness. Six percent had admission to mental hospital and 1% (3 cases) committed suicide.

Keywords: obsessive compulsive disorder

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INTRODUCTION

Though obsessive compulsive disorder (OCD) is prevalent and a distressing disorder, it had remained hidden from the interest of the medical professionals until recently.

Freud had stated that sufferers from this disorder were able to keep their affliction a private matter and concealed it because 'they were quite well able to fulfil their social duties during a part of the day once they had devoted a number of hours to their secret doings hidden from view'.

In the Asian context, the first study of the natural history of OCD among the Chinese was conducted in Hong Kong. This was a descriptive study of the psychosocial demographic, clinical features, course and prognosis of OCDs who sought psychiatric treatment in clinics and hospitals of Hong Kong Mental Health services⁽¹⁾. The general findings were on the whole similar to those obtained in studies carried out in the European countries. The only striking difference was the sex ratio. It was reported that at the end of the follow-up period, 71% of patients had improved.

In 1981, Chia⁽²⁾ made a preliminary study of 58 OCDs treated in a private psychiatric clinic in Singapore. It was found that OCD began at an early age. The mean age of onset was 25. Sixty-six percent of patients were males and only 34% were females. In the follow-up study, 57% of patients had become asymptomatic or improved.

The objective of this study is to conduct a more comprehensive investigation into the demographic and clinical features, course and prognosis of a bigger number of OCDs who had sought treatment in the same psychiatric clinic in Singapore and to compare the results with those found in Western countries.

METHODS

This study consists of 283 consecutive patients diagnosed as

suffering from OCD who had sought treatment in a private psychiatric clinic from 1968-88.

Definition of OCD:

Obsessions are defined as 'recurrent and persistent ideas, thoughts, images or impulses. They are experienced as the product of the person's own mind and not imposed from without. They are experienced as senseless, excessive, unreasonable or repugnant and cause marked distress. Attempts are made to ignore or suppress them'.

Compulsions are repetitive or stereotyped acts. They may be unacceptable or partly acceptable but are regarded by the person as being excessive and/or exaggerated. They are preceded or accompanied by a subjective sense of compulsion and may provoke a subjective resistance. They generally produce distress. Often the person acknowledges the senselessness of these activities.

Compulsive ritual is a prescribed way of performing some activities. Often, the OCD has to do the ritual because he believes that something bad - a catastrophe - will occur if he/she does not do it.

In DSM III, the exclusion criteria apply. Under the DSM III's definition of OCD, obsessive or compulsive symptoms found in patients suffering from schizophrenia, major depression or organic disorder were not given a separate diagnosis of OCD. However, in DSM III R, these exclusion criteria had been eliminated. It is now recognized that OCD can occur concomitantly with other major mental disorders⁽³⁾.

In this study, the case-notes of all patients treated by the author in his clinic were re-examined by the author at the time of the study (1994). Based on the new diagnostic criteria, the patients' diagnoses were, when indicated, altered. As a result, a few cases, previously diagnosed as suffering from schizophrenia or manic depressive disorder, were now re-diagnosed as OCD concomitantly with schizophrenia or manic depressive disorder. Also, OCDs previously wrongly diagnosed as schizophrenia based only on bizarre contents of obsessive symptoms were re-diagnosed as OCD and also included in this study. In this study, rating scales were not used.

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RESULTS

Demographic features (Table I)

1. Prevalence of OCD

In this study, 4.5% of total patients who had sought treatment in the private psychiatric clinic were diagnosed as suffering from OCD.

2. Age of onset of OCD

The mean age of onset was 27 years (1 SD 11.9). Males had an earlier age of onset of illness (25 years old) than females (29 years old). The youngest OCD was 8 and the oldest was 72.

In Western countries, the mean age of onset was quite consistent, ranging from 19 to 26^(4,7). Males also appeared to acquire symptoms earlier than females, often in early adolescence^(8,9).

About 51% of cases developed their illness prior to age 25 and 18% developed the illness after the age of 35.

3. Male to female ratio

There was more male than female OCDs in this study. The 'male to female ratio' was 1.4:1

4. Race

In this series, there were 265 Chinese (93.6%), 8 Indians (2.8%), 1 Malay (0.4%) and 9 Others [Americans, French, British, German, Swedish and Jew] (3.2%).

5. Marital status

Sixty percent of the cases were single, 37% were married, 2% were widowed and 1% were divorced/separated.

6. Educational level attained and occupational status

Thirty percent attained tertiary education, 52% secondary education and 15%, primary. About 3% of cases were illiterate.

Fifty-five percent of OCDs were economically active. Twelve percent were housewives, 11% were students and 1% were national servicemen. Twenty-one percent were unemployed.

CLINICAL FEATURES (Table II)

1. Family studies

Eleven percent of OCD patients had close relatives who exhibited obsessive traits. Also, 1% of OCD patients had close relatives who had committed suicide.

2. Precipitant and pre-morbid personality

Only 25% of the OCD patients were found to have precipitant occurring within six months of the onset of the illness.

Several investigations had pointed out the lack of conclusive information about precipitating factors for the development of OCD⁽¹⁰⁻¹²⁾.

Seven percent of cases showed pronounced obsessional personality traits such as perfectionism, stubbornness and cautiousness. Other types of pre-morbid personalities found were - avoidant 6%, schizoid 2%, borderline 0.6% and histrionic 0.4%.

3. Symptoms and behaviour

Fifty-eight percent of OCD patients had both obsession and compulsion. Twenty-five percent had only obsession and 17% had only compulsion.

Table I – Demographic features of patients suffering from OCD

| | No (n=283) | % |
|------------------------------|---------------|----|
| <i>Age of onset in years</i> | | |
| 8-24 | 144 | 51 |
| 25-35 | 88 | 31 |
| 35+ | 51 | 18 |
| <i>Marital status</i> | | |
| Single | 170 | 60 |
| Married | 104 | 37 |
| Widowed | 6 | 2 |
| Divorced/separated | 3 | 1 |
| <i>Educational status</i> | | |
| University | 34 | 12 |
| Diploma | 17 | 6 |
| Pre-university | 34 | 12 |
| Secondary | 147 | 52 |
| Primary | 43 | 15 |
| Illiterate | 8 | 3 |
| <i>Occupational status</i> | | |
| Economically active | 157 | 55 |
| Unemployed | 59 | 21 |
| Housewives | 34 | 12 |
| Student | 31 | 11 |
| National service | 2 | 1 |

Table II - Clinical features of patients suffering from OCD

| | No (n=283) | % of total |
|---------------------------------|---------------|---------------|
| <i>Form of obsession</i> | | |
| Obsessive idea | 232 | 82 |
| Fear | 150 | 53 |
| Doubt | 45 | 16 |
| Obsessive impulse | 25 | 9 |
| Obsessive image | 14 | 5 |
| <i>Content of obsession</i> | | |
| Contamination | 99 | 35 |
| Illness | 68 | 24 |
| Aggression | 45 | 16 |
| Exactness | 31 | 11 |
| Sex | 28 | 10 |
| Death | 25 | 9 |
| Religion | 20 | 7 |
| Others | 71 | 25 |
| <i>Compulsion</i> | | |
| Cleaning | 141 | 50 |
| Checking | 113 | 40 |
| Repetitive behaviour | 73 | 26 |
| Need for symmetry and precision | 19 | 7 |
| Hoarding | 14 | 5 |
| Counting | 2 | 1 |
| Miscellaneous | 8 | 3 |

Aktar et al⁽¹³⁾ also found that 25% of patients reported having obsession that were not associated with overt activities.

The forms of obsession found were: ideas (82%), impulse (9%) and image (5%). Of the ideas, the commonest found

were: fear (53%) and doubts (16%). The contents of the obsession were: contamination (35%), illness (24%), aggression (16%), exactness (11%), sexual (10%), death (9%), religion (6%) and others.

Of the compulsion, the commonest found were cleaning (50%), checking (40%), repetitive behaviour (26%), the need for symmetry and precision (6%), hoarding (5%), counting (1%) and miscellaneous.

Rachman & Hodgson⁽¹⁴⁾ found that 53% of their patients showed checking rituals and 48% reported cleaning rituals.

Because of their illness, 8% of OCDs were extremely slow in whatever they did, 8% had used abundance of washing powder, soap or detergent (wastage), 7% had to avoid certain places or situations, 6% harassed their closed ones and 4% indulged in superstitious behaviour.

Seventeen percent of the patients were incapacitated. Of the level of incapacitation, 34% were assessed as severe, 44% as moderate and 16% as mild. Ten percent isolated themselves and withdrew to their own rooms.

Thus, a considerable range of severity was evident in this study from minimal interference with daily function to extreme disability and withdrawal^(5,15).

4. Co-morbidity

About 24% of OCD patients in this study were concomitantly diagnosed as suffering from minor depressive disorder (24%), from major depressive disorder (11%), from anxiety disorder (9%), from phobia (8%), from panic (6%), from psychosis (6%) and manic depressive disorder (0.4%).

5. Other behaviour

Six percent of OCD patients had made suicidal attempts and 3 OCD patients (1%) had committed suicide.

Also, 3% had abused illegal drugs and 2.5% had abused alcohol.

One percent of OCD patients had physical illness.

6. Treatment

Most of the patients in this series were treated with drug therapy, mainly clomipramine, benzodiazepine, major tranquilizers or a combination. Behavioural therapy mainly 'thought stopping' and 'response prevention', was later introduced, combined with drug therapy.

About 10% of OCD patients in this series were treated with ECT. Most of those treated with ECT were concomitantly depressed. The result from the treatment was invariably poor.

Also in this series, 6% had admission to the public mental hospital (Woodbridge Hospital) or National University Hospital. These were the most severe of the OCD patients treated.

COURSE OF ILLNESS

Follow-up

From Table III, it can be noted that 42% of OCD patients were followed-up for more than one year. The longest follow-up period was 25 years.

For those followed-up for more than one year, about 78%

Table III – Results from the follow-up study of the OCD

| | No (n=283) | % |
|--------------------------------------|---------------|----|
| <i>Duration of follow-up</i> | | |
| < 1 years | 165 | 58 |
| 1 - 4 years | 68 | 24 |
| 5 - 10 years | 25 | 9 |
| > 10 years | 25 | 9 |
| <i>Course of illness</i> | | |
| Continuous | 48 | 17 |
| Deteriorating | 14 | 5 |
| Episodic (with incomplete remission) | 31 | 11 |
| Phasic (with complete remission) | 190 | 67 |

were found to have their symptoms removed or reduced with treatment. However, 22% of the OCD patients in this series remained mentally unwell or deteriorated in spite of treatment.

Two patients remained continuously unwell but finally recovered after 20 and 25 years. Therefore, in the study of the prognosis of OCD, a long follow-up period is necessary.

DISCUSSION

OCD is relatively rare. Traditional estimate of OCD in the general population was approximately 0.05%⁽¹⁶⁾. However, recent studies have suggested a significantly higher life time prevalence of 2.5% to 3%⁽¹⁷⁾. Turner & Beidel⁽¹⁸⁾ stated that the true prevalence rate was between 1% to 3%.

In this study, 4.5% of all the patients who had sought treatment in a private psychiatric clinic were given a diagnosis of OCD. A systematic study of the occurrence or frequency of OCD in an outpatient psychiatric clinic suggested that as many as 10% of all outpatients who entered private psychiatric clinics had significant obsessive compulsive symptoms⁽¹⁹⁾.

The age of onset of illness for this series was 27 years and 52% of patients developed their illness prior to 25. Rasmussen & Eisen found that the mean age of onset of illness was 20 years and about 65% developed their illness prior to 25⁽¹⁹⁾. The age of onset for this series was older.

The 'male to female ratio' found in this series was 1.4:1. Lo⁽¹⁾ also obtained an excess of male (73%) and explained the sex difference by stating that the Chinese women were by tradition very much inhibited than the men and would deal with their OCD symptoms secretly. Rasmussen & Eisen⁽²⁰⁾ in their review calculated an average male to female ratio of 1.1:1.

A high percentage of OCDs remained single. It was reported that OCD symptoms could interfere with an individual's capacity to form successful marital relationship^(1,10,21,22). However in this series, the percentage of divorced/separated was low which suggested that for those who did marry, they were less likely to get separated or divorced⁽²³⁾.

A high percentage of the OCDs had attained higher education and were economically active. A higher incidence of OCD patients in the upper socio-economical level had also been reported by Lo⁽¹⁾, Ingram⁽²¹⁾ and Chakraborty & Banerji⁽²⁴⁾.

In this study, 7% of cases showed obsessional personality traits. Other types of pre-morbid personalities found were avoidant, schizoid, borderline and histrionic. Other studies reported that fewer than 25% of those with OCD actually qualified for diagnosis of OCD personality⁽²⁵⁻²⁸⁾. The personality disorders most frequently found occurring concomitantly with OCDs were avoidant, dependent and histrionic personalities^(11,25,28-30).

In this study, 11% of OCDs had relatives who were found to exhibit OCD traits or depressive disorder. Lo reported that 9%

of parents and 5% of siblings exhibited pronounced obsessive traits⁽¹⁾.

In this study, the main forms of obsessions found were: ideas, impulse and image. The main compulsions found were: cleaning and checking. The other types of compulsion were repetitive behaviour (harassment, spitting, touching and spending), need for symmetry and precision, hoarding and counting.

Because of their illness, the patients were often reported by their relatives to be 'abnormal'. In this study, one female patient spent her early mornings scrubbing the drains outside her house causing much embarrassment to her family members. One rich male patient would rather sacrifice enormous wealth than be involved in a simple legal procedure.

In this study, 24% of OCDs were concomitantly diagnosed as suffering from minor depressive disorder and 11% from major depressive disorder. Association between depression and OCD still remains unclear and undefined. In Western countries, a diagnosis of major depression had been found in 28% to 38% of OCD clients^(4,11,31). Most reported that depression developed after the occurrence of their obsessive symptoms.

In this study, 9% of OCDs were also concomitantly diagnosed as suffering from general anxiety disorder, 8% from phobia and 6% from panic disorder. In the West, general anxiety occurred in 8%⁽³¹⁾ and the frequency with which OCD and panic disorder co-occurred ranged from 11% to 27%^(4,8,11,31,32).

In the early years, using less strict criteria for the diagnosis of schizophrenia, the author did misdiagnose a few of the OCD patients as suffering from schizophrenia. In this series, about 6% of OCDs were concomitantly found to suffer from psychosis, mainly schizophrenia. None of the OCDs in this group subsequently developed schizophrenia. However, Rasmussen & Tsuang⁽⁵⁾ estimated that 1%-10% of OCD patients would subsequently develop schizophrenia.

Also in this series:

1. Ten percent of OCD patients had been treated with ECT. The result from ECT was invariably poor. In the author's experience, ECT was contraindicated for OCD patients except for those who were suicidal and who also suffered from major depressive disorder.
2. Three of the OCD patients (1%) finally committed suicide. One of them also suffered concomitantly from manic depressive disorder, one from major depressive disorder and one from panic disorder. It was felt that in the 2 cases, it was the affective disorder which was mainly responsible for the suicide.

Several recent studies have indicated that the bleak outlook for OCD might have been seriously overstated. According to them, approximately 40% of OCD patients might be improved or become asymptomatic at any point even without treatment⁽²⁵⁾.

Summaries of treatment outcome for OCD patients had also indicated that 40% to 66% of OCD patients were moderately to much improved following a variety of psychological and somatic treatments⁽²⁰⁾. Steketee⁽⁹⁾ reported the effectiveness of behavioural treatment embodying exposure and response prevention to be about 70% to 80% effective.

Though most of the OCD patients in this series improved with treatment (77%), the recovery was found to be 'incomplete'. Seventeen percent of the OCD patients in this study remained severely incapacitated. Some of OCD patients would persistently harass both their family members and their doctors. The required maintenance drug therapy for OCD patients remained long. When stopped, relapses invariably occurred. Fortunately, the suicide risk for OCD patients was low.

Turner & Beidel⁽¹⁸⁾ also stated that although the prognosis

had improved over the past 20 decades, it still remained a notoriously difficult disorder to treat. Obsessions and compulsions were rarely, if ever, totally eliminated. The severely ill patient can be a great burden and problem for both himself and his family.

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