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The diagnosis and management of obsessive compulsive disorders in primary care

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Summary

Obsessive compulsive disorder is a unique psychiatric problem. It is common in the community but often hidden in the clinical setting. Scientific findings suggest an organic basis, but psychological explanations are also important. Diagnosis is not difficult if accompanied by assessment schedules. Treatment consists mainly of cognitive-behavioural therapies and serotonin reuptake blockers. The therapeutic response is good, but complete remission is uncommon.

摘要

強迫性疾病是一類獨特的精神疾病，在社區中較常見，但容易被漏診。發病既有器質性原因，也有心理學原因。如果有系統對病人進行檢查，診斷並不困難。治療包括認知行為療法和使用5-羥色胺再攝取阻滯劑。治療反應一般良好，但完全復原則少見。

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Definition

Obsessive compulsive disorder (OCD) is an anxiety disorder characterised by symptoms of anxiety and avoidance behaviour. However, it is also considered as an unique disorder, more akin to neurological condition like that of Tourette syndrome.¹ It is characterised by obsessions and/or compulsions. Usually, there are coexisting anxiety, depression and depersonalisation of various degrees. Because of its serious effects on social, vocational and even physical functioning, proper diagnosis of the disorder by primary care doctors is important.

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Prevalence of the disorder

OCD forms about 3% of all anxiety disorders, but it is called the “hidden epidemic” because few patients initiate to disclose the problem or to seek help. Even the closest relatives do not suspect the problems are associated with the disorder. The prevalence in psychiatric outpatient clinic is low, ranging from 0.5-4%,^{2,3} and that in private psychiatric clinic in the U.S. is up to 10%.⁴ In the general population, the figure for a 6-month prevalence was 1.6%,⁵ while the life-time prevalence was 2.5%.⁶ Similar results were found in Finland, Africa, Canada and Taiwan.⁷

The male: female ratio is about equal, but there is a male dominance for the first peak which occurs before 15 years of age. The second peak occurs in their thirties with women more than men. There are more women washers, but more male slowness. If it occurs after 40 years, it is usually secondary to depression. However, the average time between onset and first clinical attention is about seven to eight years.^{2,8}

Kayton & Borge⁹ found more first-born among the patients, perhaps due to the sense of ‘responsibility’, but this finding has not been replicated. There is a high celibacy rate up to 50%, especially the males, and OCD is associated with divorce and separation.¹⁰ OCD patients also have a low fertility rate within marriage.

OCD may be associated with religions, but the evidence is inconclusive.¹¹ Perhaps certain features of religious belief system are associated with certain OC symptoms. Over half of the patients can recall some precipitating events, usually of uncontrolled events in health and bereavement, especially where there is a demand for responsibility. For women, pregnancy and childbirth are often triggering events. Reactive depression can also be a precipitating factor.

Though under the broad category of Anxiety Disorders, there are a few distinct features of OCD. Insel

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*et al*¹² showed that anxiety is not always present, and Rachman & Hodgson¹³ pointed out that the patients are often in a diffuse state of 'discomfort' rather than anxiety. In a way, OCD is even more related to depression with similar biological abnormalities (e.g. non-suppression with dexamethasone test, shortened latency to REM sleep, diminished stage 4 sleep, etc.) than with other anxiety disorders. Furthermore, OCD patients do not respond to anxiogenic lactate, yohimbine, caffeine or carbon dioxide challenge. Finally, antidepressants of various types often have better therapeutic effects than anxiolytic medications. Together with a high rate of comorbidities, an independent spectrum of obsessional disorders may be a better reflection.

Etiology

Biological model

- a. Morphological aspect: OCD is sometimes regarded as an organic disorder, with abnormalities in the fronto-striatal circuit involving the inferior frontal cortex, orbital gyri, head of caudate, anterior cingulate gyri. Morphometric magnetic resonance imaging (MRI) showed more grey matter and less white matter in brains of patients, and functional MRI showed increased blood flow in orbital frontal and primary visual cortex during dreaming. The modern positron emission tomography scan showed 'hypermetabolic activity' in basal ganglia and in orbital frontal areas in patients responding to stimuli.⁷ These changes were reversed in those who have improved after medications or behavioural therapy.
- b. Neurochemical aspect: it is postulated that the disorder is due to insufficient 5 hydroxytryptamine (5HT)⁸ or an increased 5HT responsiveness¹⁴ in certain brain regions. This is because the most effective medication is the 5HT blocker, clomipramine¹⁵ and other selective serotonin reuptake inhibitors (SSRIs) that either increase synaptic 5HT or downregulate the receptors. Besides, the 5HT agonist m-chlorophenylpiperazine (mCPP) worsens the OC symptoms. However, some patients would not respond and other neurotransmitters are likely to be involved.
- c. Genetic aspect: this is not yet confirmed despite a higher probability of the first-degree relatives (4.6-10% of parents) to have the same disorder.¹⁶

Psychological model

- a. Freud's psychoanalytic theory: there is fixation at the 'anal' stage of childhood development where toilet training is a major feature, leading to obsessional personality later. The obsessions and compulsions could be regarded as defence mechanisms to avoid unconscious conflicts, as exemplified in his famous 'rat man'.¹⁷ The main defences are either by 'regression' (revert to an earlier stage of development where problems were solved by more infantile means) or by 'undoing' (engage in some other activities such as hand washing to magically end the turmoil of previous guilt-ridden behaviour). However, it is difficult to prove this theory; and psychoanalysis is ineffective in treatment.
- b. The learning or behavioural theory: it postulates that the obsessions generate anxiety which may be related to previous traumatic experience; and such anxiety is relieved by performing the compulsive acts. Behavioural therapy is an effective therapeutic measure. However, it cannot explain why only certain kinds of rituals are performed.
- c. Cognitive theory: McFall & Wollersheim¹⁸ suggested that the appraisals of personal danger (primary) and coping resources (secondary) are distorted, leading to feeling of uncertainty, loss of control and anxiety, resulting in unreasonable and inappropriate OC behaviour. Salkovskis¹⁹ holds that clinical obsessions are intrusive cognitions (but universal), the occurrence and content of which patients interpret as an indication that they might be responsible for harm to themselves or others unless they take action to prevent it. Whereas normal persons hold themselves responsible for what they do, OCD patients do not have this omission bias, i.e. they feel responsible for not doing.
- d. Recently, checkers and OCD patients are found to have deficits in their 'memory for actions' and 'non-verbal memory', which cannot be explained by anxiety alone.²⁰

Symptomatology

Obsessions

Derived from the Latin word 'obsidere' meaning 'to besiege'; obsessions are recurrent and persistent thoughts,

impulses, or images that are experienced during the disturbance as intrusive and inappropriate causing marked anxiety or distress, and are not simply excessive worries about real-life problems.

The patient attempts to ignore or suppress such thoughts, impulses, or images, or to neutralise them with some other thought or action but usually fails; even if there is some initial success, the obsessions may come back shortly. The efforts made by the person to get rid of the obsessions could be quite exhausting, extreme and bizarre e.g. washing the washing machine for the whole night.

The patient recognises that these thoughts etc. are a product of his/her own mind. The contents are usually quite contemporary and are often concerned with diseases (especially AIDS) and death, sex and violence, danger and harm, contamination and dirt, religion and sin; and the patients feel worried, repugnant, nonsensical, guilty of blasphemy and obscenity.

Compulsions

Compulsions are repetitive behaviours or mental acts that the person feels driven to perform in response to an obsession, or according to rules that must be applied rigidly in a stereotyped fashion. These behaviours are aimed at preventing or reducing distress or preventing some dreaded event or situation; however, they either are not connected in a realistic way with what they are designed to neutralise or prevent or are clearly excessive.

Compulsions are usually in the form of counting, checking and washing. There is usually a strong sense of subjective urge to engage in the behaviour, and yet with a desire to resist as there is often some awareness of the senselessness and irrationality of the act. Although compulsions usually serve to reduce anxiety, it is not always so. Subsequent repetitive behaviours serve only to increase anxiety and doubt, leading to further compulsions until the patient is exhausted rather than satisfied.⁷

Sometimes the compulsions are not motor behaviour, but covert cognitive or mental activities e.g. silent words. As with obsessions, the distress experienced is great and the efforts attempted to stop the compulsions can be quite astonishing.

N.B. According to de Silva and Rachman,²¹ a '**ruminatio**n' is a train of thought, unproductive and prolonged, on a

particular topic or theme. It differs from an obsession by not intruding into the consciousness in a well-defined form or with a clearly circumscribed content. The theme can be specific e.g. concern with religious, philosophical or metaphysical subjects such as life after death, but what goes into the thinking is non-specific and variable. Likewise, obsessions are similar but different from excessive '**preoccupations**' that are also intrusive and repetitive in nature. However, preoccupations centre on realistic current problems or worries with a lack of nonsensical or repugnant quality as with obsessions; and they are rarely resisted as being recognised as rational though perhaps exaggerated. Finally, Rachman & Hodgson¹³ suggest that it is better to speak in terms of the extent of voluntary control than to regard obsessions as involuntary while compulsions as voluntary.

Sub-classification of obsessive-compulsive disorder

Many patients have more than one type of problem, but according to de Silva & Rachman,²¹ there are a few predominant forms:

Compulsive washers/cleaners

This is the commonest form, with an excessive fear of contamination e.g. by dirt, disease. There is often an excessive use of water and detergents, with avoidant behaviour. The cleaning concerns are often 'territorial' including the kitchen and the bathroom which are immaculately clean, but the other areas of the house may remain untidy. Usually, there is a female predominance with a likely comorbidity of depressive disorder. However, there is a very famous male American figure, that of the millionaire Howard Hughes and his 'germ war'.

Compulsive checkers

This is the second commonest compulsion, with a lot of pathological doubts and worries about such doubts. They usually occur within or around the home environment, and often involve counting, ordering and arranging. There is a strong sense of inflated responsibility, and a fear of future disasters. There is no sex dominance.

Compulsive hoarding

This condition is relatively rare, presented with intensive collection and retention of excessive items that

are useless or of limited value e.g. newspapers. Often, the patient runs out of space by such stored items. The absurdity and resistance are often absent as the patient considers the behaviour as desirable but has just got out of hand. There is a sense of indecisiveness and difficulty in discarding the items, as there is worry of future sufferings without them.

Other overt compulsions

These include compulsive touching, rituals, list-making, completing things, arranging things in some order, a need for symmetry, a need to ask or to confess, and to look at particular items, etc.

Covert or subtle obsessions/compulsions

These include mental ritual compulsions such as silent counting, uttering prayers, conjuring certain images, etc. Some are upset about their nasty thoughts and have to repeat their behaviour to neutralise these thoughts. There is often a need to tell, to repeat or to confess.

Primary obsessive slowness

First described by Rachman,²² the patient takes a lot of time doing certain activities e.g. dressing. This is often secondary to a meticulous concern for orderliness. The patient tends to adhere to a strict routine and often counts while doing a routine task. There are relatively few obsessions and no anxiety reduction is experienced after the behaviour. It is not common, but often incapacitating. It tends to develop in early adulthood and take a chronic course, and the patient tends to be socially isolated.

The above subdivision is not clear cut, and many patients report different features at different times, and checkers can become washers. Obsessions and compulsions are often coexisting, with the former leading to the latter. However, such relationship is not absolute, and either obsessions or compulsions can exist in isolation. Some would like to add on another sub-group, that of primary obsessions, to describe those who have multiple obsessions but are free from compulsions.

Many patients have special numbers of significance that they use or avoid. For children with the disorder, they are often preoccupied with fears about health and safety of their relatives, and insight is often lacking.²³ For

elderly patients, their obsessional thoughts are often related to their stage of life.

At some point in time, the patient had preservation of insight (except perhaps some children). With time and chronicity, the resistance to change may diminish. Sometimes obsessions and compulsions appear quite 'normal' e.g. leaving some food behind at every meal, or putting on the left shoe before the right one. They sometimes become more severe when under stress. The distress caused must be substantial e.g. over an hour a day, and would interfere with daily life and activities. Such distress are usually directed at self but can also be disturbing to others. As a result of the symptoms, the patient procrastinates and become indecisive. Reassurance and assistance from family members and others are often required (sometimes compelled to do so), but can be quite baffling because of its repetitive nature. Quite often, marital and often sex life is affected, resulting in separation and divorce.

Co-morbidities

OCD often co-exists with the following psychiatric disorders.²⁴ :

Mood disorders

- a. primary obsessive-compulsive disorder with secondary depressive episode(s), or
- b. primary depression with secondary obsessions usually of a negative nature.

Other anxiety disorders

- a. panic disorder, as many obsessive-compulsive patients have a lot of anxiety
- b. phobic disorder, as many patients start off with some fear e.g. AIDS or dirt, etc. (especially those with compulsive washing or cleaning)
- c. post-traumatic stress disorder, as many trauma victims (as due to earthquake or war) have recurrent thoughts or images of the event; some even develop compulsive rituals.

O-C related disorders

In the U.S., there is an increasing trend to regard OCD as a distinct entity different from other anxiety

disorders. In addition, quite a number of psychiatric conditions are being considered as part of the OCD spectra,²⁵ viz.:

1. Obsessive ruminations as primary complaint, including body dysmorphic disorder (excessive concern with imagined defects in bodily appearance), hypochondriasis, pathological gambling and anorexia nervosa (excessive concern about eating).
2. Compulsive behaviour as primary complaint, including trichotillomania (excessive hair pulling), pathological gambling, drinking, shopping, fire-setting, eating (bulimia nervosa) and sexual behaviour (paraphilias). Some consider the Tourette's syndrome as compulsions.

Differential diagnosis

The cognitive and behavioural components of OCD are often confused with other diagnoses,²⁴ such as schizophrenia and depressive disorder.

Schizophrenia and delusional disorder

It is the presence of abnormal thoughts that cause misdiagnosis, as certain types of obsessions can be quite bizarre and the lack of clear-cut insight that the thoughts are absurd or irrational similar to that of a delusion. It has been discussed that obsessions and compulsions can be a defence against a schizophrenic breakdown,²⁶ but this connection is discredited. Occasionally, obsessions may be transformed into delusions²⁷ during severe depression. Some even suggest the diagnosis of 'obsessive compulsive psychosis'.²⁸

Depressive disorder

OC symptoms and depressive mood frequently coexist. It is important to establish which is the primary feature. Misdiagnosis is more common when depression masks the underlying obsessional problem. The majority of OCD patients report secondary depression,⁴ and many are secretive about their OC symptoms only to describe their depressive features to others. However, psychological treatment targeted at the underlying OCD may not be effective without first treating the depression²⁹ (Abel, 1993).

Organic brain damage

In certain organic conditions such as encephalitis lethargica, some brain damaged persons speak or behave repetitively or mechanically, sometimes called 'organic obsessions or compulsions'. However, such symptoms lack the intellectual content or intent, and other features of brain damage such as memory impairment, learning ability, etc. are evident.

Obsessional personality or personality disorder

It has been thought that obsessive-compulsive disorder is just exaggerated obsessive personality, but this is incorrect as there is rarely resistance and seldom causes distress. Some obsessional personality patients do develop obsessive-compulsive disorder subsequently, but the majority does not. However, some specific personality traits may be associated with specific obsessive-compulsive symptoms.⁷ Many do possess 'doubt-related' characters like lack of inner conviction, indecisiveness, procrastination, etc. Others have a poor tolerance of uncertainty or incompleteness, a personal high moral construct of over-conscientiousness or perfectionism. Finally, there is often an associated mood disturbance like anxiety, depression and guilt.

Management

Assessment

Firstly, the clinical features should be elicited by proper history taking from patient and other informants and clinical examination. The antecedents, behaviour (target behaviour, its duration and severity) and consequences of the OC problems should be recorded. The diagnosis can be confirmed by direct observation and induction tests such as asking the patient to touch the feared objects and grade the severity of the emotional disturbance.

Secondly, inventories e.g. the Leyton Obsessional Inventory,³⁰ the Maudsley Obsessional Compulsive Inventory,³¹ the Yale-Brown Obsessive Compulsive Scale (Y-bocs),³² etc. can be used to rate the clinical severity. Specific cognitive and guilt measures e.g. the Intrusive Thoughts Questionnaire,³³ the Guilt Inventory,³⁴ etc. are also useful.

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Other investigations may be needed to exclude other primary disorders which if found should be treated first. Any co-morbid psychiatric disorder should also be properly managed.

Psychotherapy²¹:

- a. Psychoanalysis: not effective, except perhaps a subjective understanding of the problems
- b. Cognitive-behavioural therapy:
 - i. For compulsions: 'cue exposure' (graded desensitisation or rapid flooding) either in vivo (real-life) or in vitro (in fantasy or imagination) and 'response or ritual prevention'³⁵ (also called 'apotreptic therapy') so as to develop 'habituation' that would decrease the anxiety and urge for the compulsion.
 - ii. For obsessions: thought-stopping (by a command to stop, reinforced by a rubber band), thought switching and substitution (with pre-prepared thoughts) ordered by therapist and then self-induced), distraction (e.g. mental arithmetic) and diversion (better with more complicated activities). Obsessive images can be modified by shrinking, rotating, expansion, etc. which can lessen the anxiety by inducing a sense of self-control. Thoughts exposure (habituation training) by self-rehearsal or the use of audio tape (continuously or intermittently) can be helpful but not always effective.
 - iii. For hoarders: urging the patient to throw away unnecessary possessions (or transitionally safeguarded by the therapist) that are ranked with respect to a graded hierarchy.²⁰

- iv. For primary obsessional slowness: the 'pacing-prompting-shaping' technique¹⁸ with time targets is used. It is often practised initially in the hospital and then at home.
- v. Modification of abnormal risk assessment,³⁶ and counteract overestimated perceived responsibility and guilt or the excessive personal significance, by using the 'pie technique' (pie chart of all contributing factors), and considering the irrationality or the appraisals with its untoward consequences.
- vi. Other techniques: training to improve memory functioning may help to reduce doubts in the patients; maximize or focusing the 'first check' may make further checking redundant; prompt swift checking may help boost self-confidence, etc.²⁰

During therapy, success can often be facilitated by modelling by the therapist. Applied relaxation by itself if not useful, but can be a good adjunctive measure. Other adjunctive measures such as social skills, psychoeducation with family therapy and group support are useful. Sometimes, just by delaying time or setting aside a time for the obsessions/compulsions can lessen the urge. Lastly, the use of reassurance is still controversial and some are against the use of tranquillisers.

Physical treatment

- a. Medications: clomipramine, a tricyclic antidepressant, is useful¹⁵ in high dosage, but its anticholinergic (dry mouth, blurred vision, constipation, etc.) and cardiac (arrhythmia) side-effects can be serious. In the past, clomipramine was

Table 1: Minimum daily dose used before considering a treatment failure

	Brand name	Usual dosage	Maximum dosage	
Therapeutic agent				
1.	Clomipramine	Anafranil	150 mg	250 mg
2.	Fluoxetine	Prozac	40 mg	80 mg
3.	Fluvoxamine	Faverin	200 mg	300 mg
4.	Paroxetine	Seroxat	40 mg	60 mg
5.	Sertraline	Zoloft	100 mg	200 mg
Augmentating agent				
1.	Clonazepam	Rivotril	1 mg	3 mg
2.	Buspirone	Buspar	20 mg	60 mg

Key messages

1. Obsessive-compulsive disorder is called the "hidden epidemic" as the patients rarely present themselves to doctors.
2. However, this disorder is usually quite distressing and disabling to the patients and their families, and sometimes mistaken for 'craziness'.
3. Fortunately, successful therapies are available. The response is often good though complete remission is rare. Cognitive-behavioural therapy and the serotonin reuptake inhibitors are particularly effective.
4. Primary care doctors should be alert to this disorder and should be able to render some first-line treatment.

given by intravenous infusion, but this is rarely practised today. SSRIs, especially fluvoxamine and fluoxetine, used in higher dosages than for depression (**Table 1**), are found to be effective.³⁷ Augmenting the SSRIs with clonazepam, buspirone or even clomipramine for a month may be worth trying, but one should look out for drug-drug interaction especially the cytochrome P450 effects. Other newer anti-depressants e.g. nefazodone and even the novel antipsychotics e.g. risperidone have been tried, but the results are not definite.

- b. Electroconvulsive therapy does not appear effective, but it may relieve the concomitant depression. However, just by hospitalising the patients where the responsibility has been removed may have some therapeutic effect.
- c. In the past, psychosurgery to interrupt the connections with the basal ganglia including capsulotomy, cingulotomy and limbic leucotomy have been tried when other methods were not effective. There was however only about 30-40% effectiveness.

Prognosis

The disorder usually develops gradually, with frequent late treatment, those presenting early are the washers and cleaners. The course is also chronic and fluctuates in severity, becoming worse under stress or in depression. Those with a clear association of the symptoms to specific stressors usually respond better.

Once treatment is successful, major relapses are uncommon though complete remission is rare. Premature discontinuation of medication often results in relapse within 6 to 8 weeks.³⁸ Those with co-morbid psychiatric disorder especially depression and schizotypal personality disorder fare worse. Less than 20% have spontaneous remission that lasts over a year, and about 10% have a deteriorating course. The primary symptoms may change over time, from weeks to years. Even in remission, the disorder can relapse under stress or recurrence of the initial trigger condition.³⁹ ■

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