

## A clinical case study of individual with Obsessive Compulsive Disorders and the treatment with Exposure Response Prevention

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World Journal of Advanced Research and Reviews, 2025, 25(01), 730-737

Publication history: Received on 28 November 2024; revised on 07 January 2025; accepted on 09 January 2025

Article DOI: <https://doi.org/10.30574/wjarr.2025.25.1.0075>

### Abstract:

Obsessive Compulsive Disorder (OCD) is a chronic psychiatric illness characterized by distressing and intrusive thoughts, impulses or images (obsession) and repetitive covert or overt behaviors (compulsion) that are performed to reduce distress. The case aims to provide insights into the comprehensive assessment and evidence-based interventions of OCD in various clinical contexts of OCD relapsing control by using exposure response prevention. The case highlights the importance of the using of Cognitive Behavioral Therapy (CBT) as the primary treatment approach and also using exposure response prevention for reducing relapsing tendency. Developing impulse control capacity in individuals treated with OCD through ERP. The main tools of subjective assessment were in-depth clinical interview, observation of client in the session and thought diary. In-depth clinical interview was done by the therapist through open-ended and closed questions, empathetic listening, and active listening. This case found at the 4th session the client improved 40%, 7th session 60%, and lastly 13<sup>th</sup> session she improved 90% she was benefited from the treatment day by day. She also reported that her anxiety and depression level also was decreased. Subjective rating of Mrs. X's problem was taken intermittently in assessment and treatment sessions. She rated her overall problem at the starting of psychotherapy with 100 in a '0 to 100' scale, in the 13th session she rated her problem with 25%. By sharing these cases, mental health professionals who are interested to this field can gain valuable insights into the assessment and management of OCD in various clinical contexts.

**Keywords:** Obsessive Compulsive Disorder (OCD); Exposure Response Prevention(ERP); Cognitive Behavioral Therapy; Interview

### 1. Introduction

OCD is a comparatively common mental health condition. According to the World Health Organization (WHO), OCD affects around 1% of the global population. In the United States, the National Institute of Mental Health (NIMH) guesses that 1.2% of adults have OCD. Obsessive Compulsive Disorder (OCD) is a common chronic devastating psychiatric disorder, which affects about 1–3% of the population worldwide. Epidemiological studies conducted in various countries report a current prevalence of approximately 1% and a lifetime prevalence of 2% to 3%. Adults, males and females are equally affected, but it is more common in adolescents than girls. Studies assessing pediatric samples report a male majority (70%), other adult studies report equal gender distribution or a slight female majority. Regarding sex, a dissection: age distribution of onset has been described. The mean age of onset is about 20 years, although males have slightly lower age of onset (mean about 19 years) than females (mean about 22 years). Overall, symptoms begin before the age of 25 in about 2 thirds of affected individuals.<sup>1</sup> In Bangladesh, the prevalence of OCD in children is 2.2%, which is higher to previous reports. Among obsessions, contamination by suspicion was highest, and in compulsions, washing/cleaning was highest followed by checking, repeating, and ordering rituals.

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More than half of subjects had severe OCD and comorbidity was present in 58% of subjects. Specific phobia, social phobia, major depressive disorder and TIC disorder are more common.<sup>2</sup> A diagnosis of OCD requires that the symptoms cause marked distress or significantly interfere with the persons functioning. Features of obsessive-compulsive disorder are obsession, compulsion, preoccupations with appearance, hoarding, skin picking, hair pulling, other body focused repetitive behaviors, or other characteristics of obsessive compulsive and related disorder predominate in the clinical picture. OCD is a disease of relapse and remitting. The prevalence of OCD in Bangladesh is 0.5%. Obsessive compulsive disorder may be associated with avoidance of situation, hypochondrical concern, guilt and sleep disturbance. It is reported that 20-30% of people with OCD have experienced tics.<sup>3</sup> Obsessions frequently focus on issues of contamination, aggression, symmetry/exactness, religion and somatic concerns. Compulsions often involve checking, cleaning/washing, repeating, counting and ordering/arranging. The pathogenesis OCD has been proposed to include dysfunction of the serotonergic and glutamatergic systems, as well as disruption of the cortico-striato-thalamo-cortical loops (Goodman et al., 2014)<sup>4</sup>, and twin and family studies strongly suggest that both genetic and environmental determinants play a causal role.<sup>4</sup> A study in Bangladesh found that of the obsession, contamination was the highest followed by doubt, and of the compulsion, washing or cleaning was the highest followed by checking, repeating, and ordering rituals. More than half of the subjects had severe OCD where according to CY-BOCS revealed that, more than half of the patients had severe OCD (53.3%) followed by 36.7% who had extreme OCD, 6.7% who had moderate OCD, and only 3.3% who had mild OCD. The proportion of extreme OCD was found to be high among the adolescents (48.7%) whereas severe OCD was higher among the children (71.4%).<sup>1</sup>

Fortunately, OCD is treatable. Initially we started to assess her psychological problem in two ways. 1. Subjective assessment and 2. Objective assessment. After that we made formulation to take intervention to management of OCD. According to American Psychiatric Association (APA) practice guidelines the two first-line treatments for OCD are pharmacotherapy with a serotonin reuptake inhibitor (SRI) and a specialized form of cognitive-behavioral therapy (CBT) called exposure and response prevention (EX/RP). Alone or in combination, these treatments can help up to one-half of OCD patients have minimal symptoms and achieve good functioning.<sup>5</sup> Exposure and response prevention (ERP) is a form of cognitive behavioral therapy (CBT) used to treat a variety of conditions, including anxiety, phobias, and eating disorders. It is considered the gold-standard treatment for obsessive-compulsive disorder (OCD). Exposure and response prevention can help people manage anxiety-provoking or obsessive thoughts and behavior. It involves two steps: 1. Individuals are directly exposed to stimuli that generally evoke fear, distress, obsessive thoughts, or compulsive, ritualistic behavior. 2. They learn therapeutic techniques to help prevent their usual maladaptive response; as a result, they get accustomed to experiencing a trigger but not giving in to the compulsion—this is the response-prevention component.<sup>6</sup>

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## 2. Case Report

### 2.1. Ms. X - Assessment Details

Ms. X, 18-year-old college student, presented with symptoms indicative of obsessive-compulsive disorder (OCD), specifically contamination-related obsessions and compulsions. The assessment process aimed to gather comprehensive information to inform diagnosis and treatment planning.

### 2.2. Reason for referral

The client age was Ms. X, 18 a married woman brought up in a middle-class Muslim family in urban area in Bangladesh. She is the eldest child in her family. She is a student. Ms. X suffering from psychological disorder. The client was referred to a private hospital outpatient department by her general practitioner and was assigned to present therapist for psychotherapy.

### 2.3. Problem description

Ms. X mentioned some psychological problems which caused significant distress and impairment in her social, occupational and other important areas of functioning. These psychological problems were termed as behavioral, affective, motivational, cognitive and physical domains. In the assessment sessions his problems were explored in details along with relevant history. The problems stated by her were as follows:

### 2.4. Emotional

Ms. X reported that she felt depressed and disgusted when intrusive thought came in her mind. She also felt anxious and had guilt feelings.

## **2.5. Cognitive**

Ms. X reported that she had some intrusive thoughts such as which road she was used those roads she has to use when returned. She also has some faulty beliefs such as Persistent doubting she thinks dirt gets on her from there & also color phobia such as red (blood) and yellow (stool or vomit), Catastrophizing (If I don't clean now, I will get some serious disease.). She has also rumination concerning obsessional thoughts and doubt. She also reported having difficulties in concentration and lack of confidence in doing work.

## **2.6. Behavioral**

Ms. X stated that she used to engage in excessive checking of putting things perfectly. If she was failing to do it then two or more times, she has to put that thing as it was before. When she was in doubt or in obsessional thought compulsively do the same work and try to do it perfectly and if again, she fails to do it then she compulsively does it in two times more or more than that when she feels tired then engaged another person to do perfectly. She used the same road even there was a short cut. She was very concerned about her body parts. How she put her hand or how she stood by her leg. Any car crossing then she felt very dirty, and try to wash as early as possible.

## **2.7. Motivational**

She also reported having difficulties in concentration and lack of confidence in doing work. She delayed or postponed her work for that she did not feel interest to do anything.

## **2.8. Environmental**

Ms. X reported that friend and family members always criticized her because of slow in activity.

## **2.9. Assessment**

Initial assessment was started with client's demographic information and gradually went through the symptoms, severity, mood, relevant history, present situation and presenting problems in different areas of functions. Whole assessment procedure was done in three levels, which are:

### **2.10. Subjective assessment**

The main tools of subjective assessment were in-depth clinical interview, observation of client in the session and thought diary. In-depth clinical interview was done by the therapist through open-ended and closed questions, empathetic listening, and active listening. Observation was focused on the attention of client, her appearance, eye contact, gesture, congruency of mood and speech, instant mood swing in the session. Self-monitoring form for obsessive compulsive disorder (OCD) was used.

### **2.11. Objective rating**

- Depression scale was administered to assess the severity level of depression.
- Anxiety scale which was administered in the session to get objective rating of anxiety.
- DUOCS which was also administered in the session to get objective ratings of OCD.

### **2.12. Subjective ratings of mood and overall problems**

In this procedure the client was asked to rate her overall problems and mood as she was considering. She was asked to rate her mood and overall problems from 0%-100% where 0% means lowest level of well-being and 100% means highest level of well-being.

### **2.13. Mental state examination**

- Attention and concentration: Attentive, anxious, restlessness.
- Intelligence: normal
- Insight: normal
- Perception: negative thoughts about sleep and other themes (health, work, family) most of the time specially during the pre-sleep period.
- Appearance and behavior: Appearance was gloomy, fatigue.
- Behavior was normal.
- Mood and affect: Irritability, and blank mind.
- Speech: Low voice.

- Thought: No abnormality in content but occur intrusive thought every time.
- Cognition: misconceptions and false attributions.
- Assessed problem
- Cognitive:
  - Intrusive thought: My family will be in a big trouble.
  - Catastrophizing: If I don't clean now, I will get some serious disease.
  - Fear of disaster: if I use different road when I am return back, my parents will die.
  - Persistent doubt: Walking style was not same like before, does not do her task perfectly.
- Behavioral:
  - excessive checking
  - seeking assurance
  - Avoidance
- Emotional:
  - Irritated
  - Fear and disgust
  - Anxious
- Physiological:
  - Sleep problem
  - Headache
- Motivational:
  - Lack of interest in household works
  - Pre-morbid Personality
- Relationship: Relationship with family and friends are loosening.
- Leisure activities: reading noble, listening music and watching TV.
- Prevailing mood: Anxious and irritated mood.
- Personality character: Introvert personality.

#### **2.14. Illness History:**

Ms. X informed that the onset of intrusive thoughts was at 2014 when she was adolescent. She thought everywhere dust and impurity. When she went out of home then she felt fear about crossing the road, she used support to others to cross road. Her intrusive thought using the same road were come to her mind and gradually developed persistent doubt and checking cloth and body.

#### **2.15. Types of technique**

##### *2.15.1. Psycho-education:*

Psycho education was provided and formulation was shared to help his understands the problems and mode of treatment. The client was educated about obsessive compulsive disorder, its symptoms, causes and mode of treatment. Explanation about the maintaining circle obsessive compulsive disorder was also provided her own symptoms.

##### *2.15.2. Relaxation training:*

It is found that relaxation increase the accessibility of positive memory in the brain. Breathing relaxation and Progressive Muscular Relaxation training were practiced in session for reducing level of anxiety as well as for sleep problem. She was given to practice it regularly at home.

##### *2.15.3. Pros and cons*

When the problems with reassurance seeking have been established, the patient was motivated to postpone the activity by using pros and cons analysis of repeated reassurance seeking behavior. It is also used for making decision on other problems.

##### *2.15.4. Modifying fear of intrusive thought*

Fear of intrusive thought was identified from the initial assessment through interviewing and self-monitoring form for obsessive compulsive disorder (OCD). Mainly three of techniques were used for modifying fear of intrusive thought.

## 2.16. Intervention

### 2.16.1. Pie chart analysis

As Ms. X had high associated level of guilt and shame feelings, she was invited to indicate on a pie chart .The percentage of the responsibility that each of the other person involved in the situation had She had a thought as 'I am dirty girl because I can't do any task perfectly and belief rate was 80%.

### 2.16.2. Thought Challenge

It is an effective cognitive technique of CBT for fighting irrational and negative thoughts. The original thought challenge procedure depicted by was used after modifying it into a simplified six steps procedure presented in the following.<sup>7</sup>

- What is the worst that will happen?
- What is the evidence against this idea?
- What are the evidences against this idea?
- What are the benefits of thinking in this idea (the worst thing will happen)?
- What are the costs of thinking in this way?
- What should I do about it?

These six steps of thought challenge procedure were applied to challenge and diminish of the client's irrational and negative thoughts, for example, 'if someone sees me then I think myself characterless. Before challenging the belief strength of that thought, she was rated 70% but after challenged the belief strength was 30%. He was asked to practice this procedure as homework assignment to fight with this and other negative irrational thoughts that she had.

## 2.17. Exposure with Response Prevention (ERP)

ERP are two cornerstones in the treatment of OCD <sup>8</sup>. ERP was applied for the client's problem of excessive checking, reassurance seeking and avoidance. The steps involved in the administration of the therapy are presented in the following.

- A list of situations that trigger her obsessions was compiled
- The items of the list were set into hierarchical order according to the strength of compulsive urge they produce.
  - In road/ in crowd being seen by another person----- 100%
  - If anyone touches ----- 100%
  - Changing dress in room-----70%
  - Being near the window-----50%
  - Being in the baranda-----40%
- She was asked to select from the hierarchy the highest item he can allow to be exposed in and he agreed in start from 60% anxiety level.
- She was exposed to that situation and was asked to prevent her overt responses like checking and reassurance seeking to that situation.
- She was asked to continue until her arousal is diminished.
- She was asked to evaluate the situation by rating anxiety level.
- ERP is continued to the next item in the hierarchy when, after successive ERP trial, the specific item fails to produce any compulsive urge.

As it was overwhelming for Ms. X to prevent rituals completely, she was introduced gradual procedure using Ritual Delay <sup>9</sup>. It was done in three phases—

- For the first 1-2 days, she was asked to delay in checking and reassurance seeking. Starting with 2-3 minutes and gradually increasing the duration time without decreasing the frequency.
- Then she was asked to reduce the frequency gradually.
- In the last phase, she was asked not to perform any ritual.

He was asked to practice ERP as a homework assignment.

### 2.18. Relapse prevention

Relapse prevention was also in the treatment plan to help the client to deal with future possible problems through a treatment blueprint. Potential relapse factors were explored from the clients and worked with this factor how she will deal if these come in her future life.

## 3. Result and discussion

Thirteen sessions were given to the client. The client reported improvement in her problems.

### 3.1. Objective Rating

For the objective assessment Anxiety, Depression Scale and DUOCS were applied and scores are given below.

**Table 1** Scores of Depression Scale, Anxiety Scale and DUOCS in different sessions

Session	Depression Scale	Anxiety Scale	DUOCS
1 <sup>st</sup>	98 (Mild)	66 (Moderate)	32 (Moderate)
2 <sup>nd</sup>	90 (Mild)	-----	29 (Moderate)
3 <sup>rd</sup>	82 (Minimal)	50(Mild)	26 (Moderate)
5 <sup>th</sup>	90 (Minimal)	52(Mild)	-----
6 <sup>th</sup>	79 (Minimal)	40(Mild)	24 (Moderate)
7 <sup>th</sup>	66 (Minimal)	-----	-----
9 <sup>th</sup>	52 (Minimal)	-----	21(Mild)
11 <sup>th</sup>	45(Minimal)	54(Mild)	18 (Mild)
12 <sup>th</sup>	30 (Minimal)	43(Mild)	12 (Mild)
13 <sup>th</sup>	24 (Minimal)	36(Mild)	08 (Mild)

### 3.2. Subjective rating

At the 4<sup>th</sup> session the client reported that she was benefited from the treatment. She also reported that her anxiety level was decreased. After 13<sup>th</sup> session client reported improvement in her mood and overall problem. Subjective rating of Mrs. X's problem was taken intermittently in assessment and treatment sessions. She rated her overall problem at the starting of psychotherapy with 100 in a '0 to 100' scale, in the 13<sup>th</sup> session she rated her problem with 25%.The graphical presentation of overall problem ratings is shown below.

Ms. X's wellbeing was rated in all session in a 0-100% scale, which is presented below

**Table 2** Subjective ratings of mood

Session	Percentage of wellbeing (0-100%)
1 <sup>st</sup>	10%
2 <sup>nd</sup>	20%
3 <sup>rd</sup>	20%
4 <sup>th</sup>	40%
5 <sup>th</sup>	45%
6 <sup>th</sup>	50%
7 <sup>th</sup>	60%
9 <sup>th</sup>	65%

11 <sup>th</sup>	70%
12 <sup>th</sup>	80%
13 <sup>th</sup>	90%

Ms X was rated her each problem in a self-rating (0-100) % scale that was given in the following table.

**Table 3** Each problems rating of X in (0-100) % scale

Problems	Initial Sessions	13 <sup>th</sup> session
Perfectionism	100%	25%
Persistent Doubt	100%	20%
Fear of obsessional thought	100%	20%
Over responsibility	70%	10%
Checking	7-8 times	2 times
Reassurance seeking	4-5 times	0
Sleep problem	50%	10%
Daily life activity	90%	10%
Typical walking, standing	98%	20%

Ms. X came to therapist with some intrusive thoughts and checking, reassurance seeking behavior. Her symptom has reduced in 13 sessions after applying some CBT techniques. Ms. X was motivated and regular in session. She tried to do homework regularly. These helped her to progress in session more quickly.

Although the symptoms of OCD may last indefinitely, its prognosis is best when the sufferer has milder symptoms that have been present for a short time, and the person has no other emotional problems. Ms. X had suffering from OCD symptoms for only 2 years only in moderate level with depressive symptoms. That's make her prognosis good in therapy.

According to Nimesh G. Desa (2002) poor prognosis for OCD is usually due to poor treatment compliance, delay in starting treatment, stressful life conditions, poor premorbid adjustment to interpersonal relations and environment. Ms. X showed good compliance with CBT but not with medication and she was newly married which is a transition period for person. These conditions are poor prognosis for her longer recovery<sup>10</sup>.

Though relapse prevention was in treatment plan. Client attended the follow-up session. So, it is really helpful for the optimistic that she will never fall in OCD symptoms again. Because according to Foa et al (2005) to relapse rate of OCD is 12% in CBT respondents (with or without medication)<sup>11</sup>.

#### 4. Conclusion

This case provides a comprehensive overview of obsessive-compulsive disorder (OCD), highlighting the assessment, diagnosis, and treatment process. The cases illustrate the effectiveness of Cognitive Behavioral Therapy (CBT) in reducing symptoms and improving functioning in individuals with OCD. The findings support the importance of evidence-based interventions and a personalized approach in addressing the diverse manifestations of OCD. By sharing these cases, mental health professionals who are interested to this field can gain valuable insights into the assessment and management of OCD in various clinical contexts.

#### Compliance with ethical standards

##### *Disclosure of Conflict of interest*

The author declares no potential conflict of interest

*Statement of informed consent*

Informed consent was taken from the participant.

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