

Phenomenology of Obsessive Compulsive Disorder

DR. MANUBHAI C. PARMAR¹, Dr. Nehalkumar P. Shah²

¹DPM, MD. Psychiatry, HEAD of Psychiatry Department,
G.M.E.R.S. Medical College, Valsad

²MD. Psychiatrist

Abstract: *Obsessive-Compulsive Disorder (OCD), one of the anxiety disorder, is a potentially disabling condition that can persist through out a person's life OCD has very long roots in the history. McBeth in Shakespeare's play of the same name relates of his wife "It is accustomed action with her, to seem thus washing her hands".*

In the seventeenth century, obsessions and compulsions were often described as symptoms of religious melancholy. The Oxford Don, Robert Burton, reported a case in his compendium – The Anatomy of melancholy (1621); "If he be in a silent auditory, as at a sermon, he is afraid he shall speak aloud & unaware, something indecent, unfit to be said

Keywords: OCD, anxiety disorder.

1. HISTORY & INTRODUCTION

The time changes all concepts and "Obsessive-compulsive Disorder" is not an exception.

Obsessive-Compulsive Disorder (OCD), one of the anxiety disorder, is a potentially disabling condition that can persist through out a person's life.

OCD has very long roots in the history. McBeth in Shakespeare's play of the same name relates of his wife "It is accustomed action with her, to seem thus washing her hands".

In the seventeenth century, obsessions and compulsions were often described as symptoms of religious melancholy. The Oxford Don, **Robert Burton**, reported a case in his compendium – The Anatomy of melancholy (1621); "If he be in a silent auditory, as at a sermon, he is afraid he shall speak aloud & unaware, something indecent, unfit to be said."

In his sermon on religious melancholy, **John Moore**, Bishop of Norwich-England, Referred to individuals obsessed by "naughty, and sometimes Blasphemous Thoughts which start in their minds, while they are exercised in the worship of God despite all their endeavours to stifle & suppress them....., the more they struggle with them, the more they increase."

Modern concepts of OCD began to evolve in the 19th century. Obsessions in which insight was preserved were gradually distinguished from "delusions" in which it was not. Compulsions were distinguished from "impulsions", which included various form of paroxysmal, stereotyped and irresistible behaviour.

Obsession & compulsion symptoms were first described in psychiatry literature by **Esquirol (1772-1840)**. In his psychiatry textbook in 1838, Esquirol ascribed OCD as a form of "Monomania" or partial insanity. His ideas were fluctuated

between attributing OCD to disordered intellect and disordered wil.

Dagonet (1823-1902), considered compulsion as a king of impulsion and OCD as a form of "Folie impulsive (impulsive insanity)." In this illness, impulsions violentes (irresistible) overcome the will and became manifest in obsessions or compulsions.

Morel (1809-1873) placed OCD within the Category, "Delire emotif" (Diseases of emotions) which he believed originated from pathology affecting the autonomic nervous system. He felt that attempts to explain obsessions and compulsions as arising from a disordered intellect did not account for the accompanying anxiety.

Megan (1825-1916) considered OCD a "Folie des degeneres" (Psychosis of degeneration) indicating cerebral pathology due to defective heredity. In 1868, **Griesenger** published three cases of OCD, which he termed "Grubelnsucht"- a ruminatory or questioning illness.

In 1877, **Wetsphal** ascribed obsessions to disordered intellectual function. Westpha's use of the term "Zwangsvorstellung" (compelled presentations or idea) gave rise to our current terminology, since the concept of "presentation" encompassed both mental experiences and actions. In Great Britain Zwangsvorstellung was translated "Obsessions" while in the United States it became "Compulsions". The term "obsessive-compulsive disorder" emerged as a compromise between two.

In the last quarter of nineteenth century, the diagnostic category "Neuroasthenia" (inadequate "Tonus" of the nervous system) engulfed OCD along with numerous other disorders.

As the 20th Century opened, both **Pierre Janet** (1859-1947) and Sigmund Freud (1856-1939) isolated OCD from neuroasthenia. Janet, in his regarded work, "les obsessions et la

psychasthenic" (obsessions and psychasthenia), proposed that obsessions and compulsions arise in the third (deepest) stage of psychasthenic illness. because the individual lacks sufficient psychological tension (a form of nervous energy) to complete higher-level mental activities (those of will and direct attention), nervous energy is diverted into the activates more primitive psychological operations that include obsessions and compulsions.

Sigmund Freud gradually evolved a conceptualization of OCD that influenced and then drew upon his ideas of mental structure, mental energies and defense mechanisms. In Freud's view, the patient's mind responded maladaptively to conflicts between unacceptable, unconscious sexual or aggressive id impulses and the demands of conscience and the reality. It regressed to concerns with control and tomodes of thinking characteristic of anal-sadistic stage of psychosexual development, ambivalence which produced doubting, and magical thinking which produced superstitious compulsive acts.

In DSM-IV-TR, OCD is considered as anxiety disorder. The reasons behind these considerations are ;

1. Anxiety is often associated with obsessions and resistance to compulsions.
2. Anxiety or tension is often immediately relieved by yielding to compulsions.
3. OCD often occurs in association with other anxiety disorders.

A lot of healthy people can identify with some of the symptoms of OCD, such as checking the stove several times. But for OCD to be diagnosed, such activities consume at least an hour a day, are very distressing and must interfere with daily life in social occupational areas.

Epidemiological studies in different cultures have confirmed the findings that upto 1% to 2% of the general population worldwide suffer from OCD at any given point of time. [Sasson et al., (1997)]

OCD is the fourth most common mental disorder in adult after phobias, substance abuse and depression. OCD is recognized as more prvalnet than schizophrenia and nearly as common as asthma and diabetes mellitus. [Benjamin J. Sadock, Virginia A. Sadock (2003)]

OCD spans the life cycle. It has been described in children as young as age 2 [Rapoport JL (1989)] and also in the very elderly [Kojn R et al., (1997)]

OCD suffers often attempt to hide their disorder rather than to seek help. Often they are successful in concealing their obsession-compulsive symptoms from friends & co-workers. WHO reported the treatment gap in OCD patients was 57.3% largest among all psychiatric disorders. [Kohn et al., 2004] An unfortunate consequence of this secrecy is that people with OCD are not getting professional help until years after the onset of their disease and by that time, they may have learned to work their lives and family members' lives around the rituals.

OCD occurs in the spectrum from mild to severe. But if sever left untreated, can destroy person's capacity to function at work, at school or even in the home. patient with OCD suffer significant personal and social morbidity and may have difficulty in maintaining a job, finishing school and developing relations ships. [Koran et al., (1996)].

Substantial progress has been made in the last two decades in understanding the various aspects of the disorder that include its prevalence, clinical presentation, co-morbidity, etiology and treatment.

Significant progress has been made in understanding the pathophysiology of OCD although the exact cause of this disorder is still remaining unknown. Neuroimaging studies have implicated the frontal basal ganglia thalamo cortical circuit in the pathogenesis of the disorder. [Aouizerate et al., (2004)]

Paul Arnold identified children with OCD caused by autoimmune response to group A-beta haemolytic streptococcal infection created a neroimmune hypothesis of the pathogenesis of OCD. [Arnold et al., (2001)].

Several studies have demonstrated efficacy of selective serotonin reuptake inhibitors as well as cognitive behaviour therapy. **L.Bear (1995)** reported 23-30% of the patients who were resistant cases of OCD were significantly imporved after cingulotomy. He also proposed cingulotomy as a last resort of treatment for only refractory cases of OCD. **Husted DS (2004)**, in his study, suggested a role of procedures like vagal nerve stimulation, transcranial magnetic simulation, invasive but potential reversible deep brain stimulation and psychosurgery in the treatment refractory cases of OCD.

In the last decade, there has also been considerable interest in a group of disorders called obsessive compulsive spectrum disorders. Those are believed to share some of the features of OCD.

In a World Health Organization study that determined the leading causes of mortality and morbidity in developed countries, OCD was found to be the eighth leading cause of disability for any medical or psychiatric condition for age 15 through 44.

2. AIMS AND OBJECTIVES

This study was underten with aims of :

- 1) To study socio-demographic factors associated with OCD.
- 2) To study various clusters of obsession and compulsion>
- 3) To detect co morbidity in a patient with OCD.
- 4) To carry out risk of suicide in OCD.

3. MATERIAL AND METHODS

The study was a prospective study, conducted in G. G. Hospital, affiliated with M.P.Shah Medical college, Jamnagar. It is the largest government run hospital in Saurashtra region.

All the patients visiting the out patient department in psychiatry during August 2005 to August 2006 were clinically screened for obsessive compulsive symptoms. The patients, suggestive of suffering from OCD, were thoroughly evaluated for the diagnosis of OCD by using DSM-IV-TR criteria for the OCD. Then the patients with the diagnosis of OCD were subjected to

Social class	Per Capita income (Rs.)
I	>2148
II	1074-2147
III	644-1073
IV	322-643
V	<322

10-item Yale-Brown obsessive compulsive scale (Y-BOCS) for assessing the severity of OCD. Along with OCD, patients were also screened clinically for having any comorbid psychiatric morbidity. Particular attention was paid to check whether patients had suicidal ideas or not.

All the patient were explained about the procedure, its purpose and were assured of confidentiality of the information.

Inclusion Criteria:

- 1) Definite diagnosis of OCD as per DSM-IV-TR criteria and clinical interview.
- 2) Age more then or equal to 18 years.

Exclusion Criteria:

- 1) Patient with axis-I diagnosis of other mental disorder like schizophrenia, schizophreniform disease, major depressive disorders or anxiety disorders.
- 2) Patient with axis II diagnosis of obsessive compulsive personality disorders or other personality disorders.
- 3) Patients who are uncooperative or not willing to participate.

After interviewing the participated patients clinically, the data was filled in a predetermined proforma. The data were tabulated and categorized statistical analysis was done wherever applicable.

Instruments Used In The Study:

- 1) Semi structured proforma for recording socio-demographical variables including details of chief complains medical and psychiatric history and mental status examination.
- 2) Prasad's classification of social class, 2001, revised.
- 3) DSM-IV-TR diagnosis criteria for OCD.
- 4) Yale Brown obsessive compulsive scale. (Y-BOCS)

Prasad's classification of social class : [Prasad's classification of social class revised 2000-2001]

This scale was developed by Prasad, Which was revised in 2000-01. It attempts to measure the socio-economic class of an individual in community. This scale is based on the per capita income of the individual. There are 5 social classes as mentioned below.

DSM-IV-TR diagnostic criteria for OCD; [Diagnosic & statistical manual of motional disorders, 4th ed. Text Rev. Washington DC: American psychiatric association]

Diagnostic and statistical manual of mental disorders (DSM) is the psychiatric classification developed by American Psychiatric Association in collaboration with other groups of mental health professions.

After the 1st edition in 1952, five editions have been published since then, which include SDM II (1968), DSM III-R (1987) DSM-IV (1994), and DSM-IV-TR (2000).

DSM IV-TR diagnostic criteria for obsessive compulsive disorder include 5 sub criteria from criteria A to criteria E including one specifier of poor insight.

DSM-IV-TR criteria allow clinician to specify patient have poor insight type of OCD if they generally do not recognize the excessiveness of their obsessions and compulsions.

Yale brown obsessive compulsive (Y-BOCS): [W.K.Goodman et al. (1989)]

The scale was developed by Goodman W.K.Goodman, L. H. Price, S. A. Rasmuseen, C. Mazure, R. L. Fleischmann, C. L. Hill, G. R. Heninger and D.S. Charney in 1989.

It provides specific measure of severity of symptoms of obsessive compulsive disorder that is influenced by the type of obsession or compulsion present.

The scale is clinician rated, 10 item scale, each item rated from 0 (no symptoms) to 4 (extreme symptoms) with a total range of 0 to 40 and separated subtotals for severity of obsession and compulsions. Time required to complete the scale is 30 minutes.

Many authors demonstrated the validity of Y-BOCS in determining the severity of OCD. [Goodman et al. Jha (2004)].

4. RESULTS & DISCUSSIONS

During the study period, 50 patents with the diagnosis of obsessive compulsive disorder phenomenologically studied. The result are as under.

Demographical Characteristics:

Table 1 : Demographic Characteristics

Characteristic		N = 50 n (%)
Gender	Male	27 (54)
	Female	23 (46)
Age	15-24	17 (34)
	25-34	19 (38)
	35-44	8 (16)
	45-55	6 (12)
Age	Range	18 – 54
	Mean (SD)	30.28 (9.50)
Marital Status	Married	26 (52)
	Unmarried	17 (34)
	Divorced	06 (12)
	Widow/Widower	01 (2)
Education	Illiterate	13 (28)

	Primary	15 (30)
	Secondary	16 (32)
	Above	5 (10)
Family constellation	Joint Nuclear	30 (60) 20 (40)
SE Status	I	6 (12)
	II	8 (16)
	III	9 (18)
	IV	16 (32)
	V	11 (22)

In our study, 27 (54%) of the patients were male while 23 (46%) of patients were female.

Age :

The range of age of patients in our study was 18 to 54 years with a mean of 30.28 years and SD was 9.50. 19 (38%) patients were in the age group of 25-34 years while 17 (34%) were 15-24 years. 8 (16%) patients were between 35-44 years with only 6 (12%) patients were higher than 44 years i.e. in the range of 45-55.

Marital Status :

In our study, 26 (52%) were married while 17 (34%) patients were unmarried. 6 (12%) of patients were previously married but got divorced with the commonly reason of family disturbances due to illness (4 patients). Only 1 (2%) was widow.

Education :

The highest 16 (32%) patients were educated upto secondary level of education following of which primary level 15 (30%) and illiterate 14 (28%) in order. Only 5 (10%) of patients were educated above the secondary level.

Family status :

30 (60%) patients were in the joint family while 20 (40%) were having nuclear type of family.

Socioeconomic class :

Above table shows maximum numbers of patients were considered as poor as in class IV – 16 (32%) patients and in class V – 11 (22%) patients. While in other classes, 9 (18%) were in class III and 8 (16%) in class II. Only 6 (12%) patients had socio-economic class I.

Religion :

41 (82%) were Hindu while 9 (18%) patients were Muslims.

Disease Characteristics :

Age of onset :

Table II : Age of onset of OCD

Patients	Age of Onset (years)
Male	19.8
Female	22
Range	8-36
Mean	20.8
S.D.	6.66

In our study, mean age of onset of symptoms of obsessive compulsive disorder is 20.8 years with a range of 8-36 years and standard deviation (SD) of 6.66.

Male patients have quiet early onset at 19.8 years as compare to females (22 years). Similar result had shown in an Indian study by **Bhattacharyya (2005)** who shows mean age of onset of OCD at 21.32 yr.

Mohammad Reza Mohammadi, in his study demonstrated mean age of onset of OCD was 21.27 (SD =11.84) years. The onset age in male was 21.24 and in female 21.79. The difference was not statistically significant.

Steven (1986) demonstrated mean age of onset of OCD by bimodal with peak at 12-14 and at 20-22 years. He also demonstrated early age of onset in male (15.5 ± 5.4 years) as compared to female(22.9 ± 12.6 years).

Early Vs Late Onset :

Table III : Difference between early and late onset

Characteristics		Early onset (<18 yr) N = 18	Late onset (≥ 18 yrs) N = 32	Statistics
Sex	Male Female	10 8	17 15	
Untreated period		8.9	7.3	T 48 = 0.90 NS
F/H Positive		2	4	NS
Obsession	Contamination Doubt Aggressive Symmetry Repetitive Sexual	10 4 4 6 5 8	20 8 16 11 8 6	X ² = 0.23 NS X ² = 0.05 NS X ² = 3.70 NS X ² = 0.005 NS NS X ² = 0.05 NS X ² = 3.77 NS
Compulsion	Washing Checking Repetitive Ordering Hoarding	10 4 8 6 -	20 7 15 11 2	X ² = 0.23 NS X ² = 0.10 NS X ² = 0.03 NS X ² = 0.06 NS X ² = 1.17 NS
Suicide +ve		3	-	NS
Co morbidity	Panic MDD BDD Social Phobia Psychosis GAD ICD TICS Dysthymia	0 5 1 4 1 1 2 1 -	4 17 - 2 1 2 - - 2	X ² = 2.44 NS X ² = 2.01 NS X ² = 1.81 NS X ² = 2.78 NS X ² = 0.1 NS X ² = 0.01 NS X ² = 3.72 NS X ² = 1.81 NS X ² = 1.17 NS
Y-BOCS		23.6	21	T48 = NS
Insight +ve		2	2	NS

T48 = T test, X² = Chi square test, NS = Non significant

Above table showed that there is no statistically significant differences found in phenomenology of OCD between (<18 years) onset and late onset (≥18 years) group.

Do Rosario Compos (2001) reported that no significant differences were found between early onset (<18 years) and late onset (≥ 18 years) group except pressure of hoarding compulsions and repeating rituals comorbid the disorder among early onset group. Early age is associated with associated with higher scores on Y-BOCS scale.

Albert U demonstrated age of onset associated with more severe group while rests of clinical variables are equal. **Tukel (2005)** reported that early age of onset was associated with symmetry religious obsession. Hoarding collecting compulsions also were significantly more than late onset group.

Noshirvani (1991) demonstrated that early onset was associated with checking and late onset more washing. **Chabone (2005)** reported that early onset was associated with strong family history of OCD. No other significant clinical variables detected. **Delome (2005)** demonstrated that early onset had increased frequency of Tourette's syndrome, while late onset OCD had increased frequency of GAD as a comorbid psychiatric disorder.

Untreated period :

In present study, mean duration of untreated period after onset of symptoms of OCD was 7.88 years. men (9.2 years) have quite longer duration of untreated period in contrast to females (6.2 years).

Venkatasubramaniam (2001), in an Indian study, showed mean duration of illness before treatment sought is 3 years. This is significantly less then that duration of our study. **Steve (1986)** reported to be having untreated period of 7.6 ± 9.3 years.

In one study, WHO also noted treatment gap in OCD patients [**Kohn R et al (2004)**]

Family History :

In present study, 6 (12%) patient reported to be having symptoms of OCD among the first degree relatives.

Hettema JM (2001) did metaanalysis and review of genetic epidemiology of anxiety disorders and noted to have significant familial aggregation in patients with OCD. **Swedo SE (1989)** noted 25% of subjects had first degree relative with OCD.

Obsessional traits :

In our study, 10 (20%) of patients had presence of obsessional traits prior onset of clinical symptoms of OCD. These traits include obstinacy, parsimony, punctuality and orderliness.

Substance use :

Table IV : Substance use in OCD patients

Substance	N = 50 n (%)
Alcohol	5
Tobacco	20
Smoking	15

40 (80%) patients had shown taking one or more substance in any forms.

[2] Clinical Features :

Table V :

Types of OCD :

Type of OCD	N = 50 n (%)
Mixed	49 (98)
Predominant obsession	1 (2)
Predominant compulsion	0

Above tale shows types of OCD according to the presence of either obsession or compulsion or both. In our study, 49 (98%) of patients had mixed OCD i.e. Presence of both obsession and compulsion while 1 (2%) patient was predominantly obsessional.

Girishchandra BG and Sumat Khanna (2001) in an Indian study, reported 59.4% patients with mixed type, 37.6% patients with predominant obsessional while 3% of patient was having predominant compulsion.

Foa E. et al (1995), in their DSM IV field trial study, noted 91% patients with mixed obsessions and compulsions, 8.5% with predominant obsessions and only 0.5% of patients fell in "predominant compulsion" category.

Types of Compulsion

Table VI : Types of compulsion

Types of Compulsion	N = 50 n (%)
Behavioral	11 (22)
Mental	12 (24)
Both	27 (54)

In present study, maximum number 27 (54%) of patients had both behavioral as well as mental compulsion while 11 (22%) patients had only behavioral compulsion and 12 (24%) had only mental compulsion.

Foa E. et al (1995) in DSM-IV field trial study reported 79.5% patients had both behavioral and mental compulsion while only 0.0% had only mental compulsions.

Rituals in OCD:

Obsession :

Table VII : Obsessions in OCD patients

Obsession	Male N = 72	Female N = 21	Total N = 50	Statistics
Contamination	13	17	30 (60)	$X^2 = 4.43$ NS
Aggressive	12	8	20 (40)	$X^2 = 0.48$ NS
Sexual	10	4	14 (28)	$X^2 = 2.37$ NS
Religious	8	5	13 (26)	$X^2 = 0.401$ NS
Symmetry	9	8	17 (34)	$X^2 = 0.012$ NS
Doubt	6	6	12 (24)	$X^2 = 0.013$ NS

$X^2 =$ Chi square test, NS = Non significant

In our study, contamination was the most common obsession found in 30 (60%) patients, followed by Aggressive obsession 20 (40%) patients Need for symmetry 17 (34%) patients Sexual obsession 14 (28%) patients Religious obsession in 13 (26%) patients Pathological doubt was found in 12 (24%) of patients.

Above table also shows different kind of obsession in male and female separately. No statistically significant difference was found in contest of obsession between male & female patients.

So it can be concluded that gender difference had no impact on the type of obsession. Our study is supported by many other studies.

Egrilmez A. et al (1997), in their study, reported contamination (53.3%) as the most prominent obsession, they also noted religious obsession (11.1%) was infrequent.

Okasha A. (1994) reported religious and contamination obsession (60%) was prominent obsession with presence of somatic obsession in 49% of patients. Somatic obsession was not there in our study.

David Matrix –Cols (2002), in his study reported aggressive obsession as the most common obsession with other types of obsessions as following.

- Aggressive - 74%
- Contamination - 56%
- Sexual - 21%
- Hoarding - 26%
- Religious - 18%
- Somatic - 15%

From India, **Girishchandra BG (2001)** reported pathological doubts as most common types of obsession followed by contamination, while in our study; pathological doubts was the least common. These differences may be due to a short sample size in our study.

S.Akthar (1975), from India, classified content of obsession in five broad categories in order of their frequency. They were dirt & contamination, aggression, inanimate, impersonal themes, religious and sexual matters.

Compulsion :

Table VIII : Compulsions in OCD patients

Compulsions	Male N = 27	Female N = 23	Total N = 50	Statistics
Washing	13	17	30 (60)	$X^2 = 3.43$ NS
Checking	5	6	11 (22)	$X^2 = 0.414$ NS
Ordering	9	8	17 (34)	$X^2 = 0.12$ NS
Repeating	13	10	23 (46)	$X^2 = 0.11$ NS
Hoarding	1	1	2 (4)	$X^2 = 0.13$ NS

$X^2 =$ Chi square test, NS = Non significant

Above table shows the pressure of compulsive washing as the predominant compulsion (60%) followed by Repeating Rituals (46%), Ordering (34%), Checking (22%) and Compulsive Hoarding was found in 1 (2%) patients in order of frequency.

J.H.Dawson (1977) reported to be having some gender differences in the presentation of compulsion with some having more common compulsive cleaning behaviour than that in the men.

Jaisoorya TS (2003), in an Indian study, reported to be having cleaning and washing as the most common compulsion followed by ordering, repeating, checking and hoarding in order of frequency. **Tezcan E, Millet B. (1997)** reported presence of washing compulsion in two thirds of their sample patients followed by specific activities like praying & counting i.e. repeating rituals.

David Mataix – Cols (1999), reported following type of different compulsions.

- Checking = 71.5%
- Cleaning = 59.5%
- Repeating = 49.5%
- Counting = 35.3%
- Ordering = 34.2%
- Hoarding = 20.6%

Juang YY, Liu CY (2001), noted checking was the most common compulsion followed by washing and orderliness.

Okasha A (2004), in his study, noted most common compulsion were repeating Rituals (68%) cleaning and washing (63%) and checking (58%).

Gender differences in presentation of symptoms:

There was no statistically significant difference in the type of obsession or compulsion among male and females which rules out any gender differences in the presentation of symptoms of OCD.

Lensi P (1996) reported in his study that men are having early age of onset, higher frequency of symptoms such as sexual, exactness and symmetry obsessions and odd rituals while women had late onset of symptoms and higher frequency of aggressive obsessions with higher rates of associated panic disorder.

Maina G (1999) demonstrated no significant differences among OCD patients according to gender.

JH Dowson (1977) showed that women had significantly higher incidences of contamination phobia and of compulsive cleaning behavior than did the men.

Juang YY (2011) reported in his study that more men than women presented with obsession of need of symmetry.

The difference between our study and these studies may be due to less sample size in our study.

Washers and checkers :

Table IX : Difference between washers and checkers

Characteristics		Washers (OCD-W) N = 7	Checker (OCD-Ch) N=2	Washer Checker (OCD-W-Ch) N= 6	Statistics
Sex	Male Female	5 2	0 2	3 3	
Age of Onset (yrs.)		20.14	23	20.5	F ratio = 0.56 NS
Untreated period		5.4	4	9.2	F rati on = 0.46 NS
Co-morbidity	MDD Social phobia Panic ICD Tics	3 - - 1 -	1 - - - 1	3 2 1 - -	NS NS NS NS NS
Insight-ve		-	-	-	
Y-BOCS		21.4	28.5	26.5	F ratio = 1.12 NS
Suicide ideas +ve		2	1	1	NS
Family history +ve		1	-	-	NS

F ratio = Annova test, NS = Non significant

Above tables shows no significant differences between washer (OCD-W) Checkers (OCD-Ch) & Washer-Checker (OCD W-Ch) in demographic and clinical variables.

Omori (2006) also demonstrated no significant difference exist between washers and checkers in terms of demographic and clinical variables.

Matsunga (2001) reported that no significant differences in clinical characteristics were observed between W & C groups. He also suggested that lifetime washer checker may not be useful in sub typing OCD.

However WC group showed poor level of insight, more severe psychopathology & global dysfunction.

Khanna S (1992) reported that checkers and washers sub typing of OCD is valid and reported that washers have earlier age of onset, more male dominance then female while mixed group had female dominance. **Bhattacharya (2005)** reported evidence of familiarity of checker subtype of OCD.

[3] Co-morbidity in patients with OCD:

While observing co-morbidity in OCD patients, 39 (78%) patients had at least one co-morbid DSM-IV-TR diagnosis of any psychiatric disorders.

Table X : Co-morbidity in patients with OCD

Co-morbid diagnosis	N = 50 n (%)
Major Depressive Disorder	22 (44)
Social phobia	6 (12)
panic disorder	4 (8)
Generalized Anxiety Disorder	3 (6)
Impulse Control Disorders	2 (4)
Dysthymic Disorder	2 (4)

Psychosis	2 (4)
Body Dymorphic Disorder	1 (2)
Agoraphobia	1(2)
Claustrophobia	1 (2)
Tics	1 (2)

Above table shows that Major Depressive Disorder was the most common co-morbidity in patients with OCD occurring in 22 (44%) patients. Anxiety disorders including panic disorder, agoraphobia, claustrophobia, social phobia and generalized anxiety disorder was presents in 15 (30%) of patients dysthymia was present in 2 (4%) of patients.

Psychotic symptoms were found in 2(4%) patients. This patients had symptoms suggestive of schizophrenia but not fulfilling the diagnosis criteria for schizophrenia or delusional disorder psychotic disorders.

Rasmussen and Esen (1994), in their study, reported lifetime prevalence of major depression in two thirds of OCD patients. He also showed panic disorder, social phobia, eating disorders & Tourette's disorder as other co-morbid diagnosis.

Juang and Liu (2001) reported that 41.5% of patients in their study sample showed co-morbid depressive disorder. He also reported that female had more major depressive disorder then male patients with OCD.

From India, **Bhattacharya (2005)**, reported co-morbidities in patients with OCD as following.

Major depressive disorder	16.5%
Dysthymia	5.5%
Anxiety disorders	6.9%
Generalized anxiety disorder	2.3%
Panic disorder with & without	1.4%
Agoraphobia	
Social phobia	4.6%

The higher rate of prevalence of M.D.D. is our study may be due to short sample size in our study.

Stekette et al. (1999) reported Anxiety disorders as a major co-morbid diagnosis with presence in 16% of sample patients with OCD. **Angest (2004)** also reported high co-morbidity of anxiety disorders in patients with OCD. The difference in prevalence of anxiety disorders in our result may be due to short sample size in our study or may be due to overall low prevalence of anxiety disorders in India. [**Khanna (1999)**]

Grab (2001) reported a rate of 15% of Dysthymia as a co morbidity of OCD which was quiet higher then our study.

Angest (2005) reported Bipolar disorder and Bipolar spectrum disorders are common co-morbidity of obsessive compulsive disorder. He also reported that there was no clear association between OCD and major depressive disorder or phobias. Bipolar disorder is not found as co-morbidity in our study.

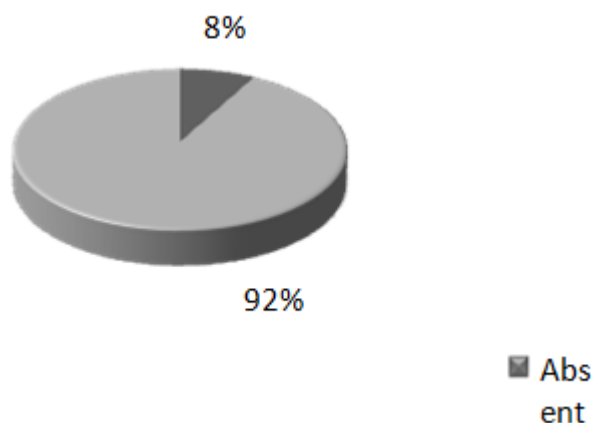
Hasler (2005) demonstrated cluster analysis of OCD with co-morbidity.

- Factor I :- (Aggressive, sexual, religious, and somatic obsession with checking compulsions) was broadly associated with anxiety disorders.
- Factor II :- (Symmetry and mental compulsion) associated with Bipolar disorders, panic disorder and agoraphobia.
- Factor III :- (Contamination obsessions and cleaning compulsions) associated with eating disorders.

In our study, 2 (4%) patients had impulse control disorders. Among them, one had intermittent explosive disorder and the other had compulsive buying. One patient (2%) also had Tics disorder but not met the criteria for Tourette's syndrome.

Insight :

Chart I : Insight of patients with OCD



Above chart shows 4 (8%) of patient did not have insight regarding senselessness of excessiveness regarding their obsession.

in DSM-IV field trial study, **Foa (1995)** demonstrated that 5% of patients in his sample were not having insight and another 25% of patients were uncertain to various degrees about whether their obsession and compulsion were senseless. Similar results were obtained by **Okasha (1994)** in his study. He reported 9% of patient is insight less in his study population.

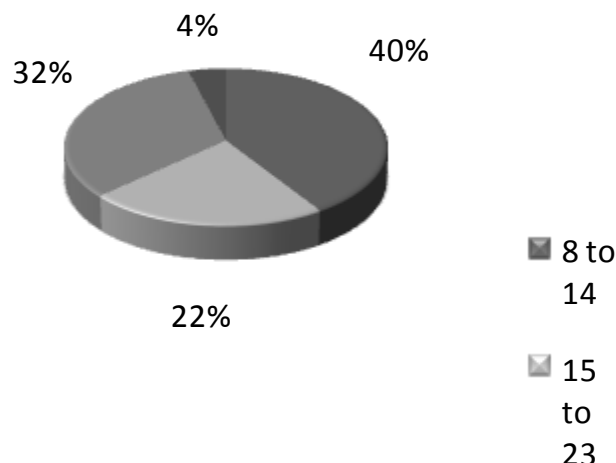
Risk suicide :

12% of patients with OCD are having suicide ideas; all of them also had major depressive disorder as co-morbidity.

Mohammadi (2005) noted 6% patient with OCD had suicidal ideation or attempt. **Chia (1996)** reported 1% suicide attempt rate is patients with OCD higher rate of suicide ideation may be due to less sample size in our study.

Y-BOCS Score :

Chart II : Y-BOCS score of the OCD patients



Most of our patients fall into “Moderate” category of OCD having 20 (40%) of patients, while mild OCD in 11 (22%) patients, severe OCD in 16 (32%) patients and only 3 (6%) patients had vary sever OCD.

Mean of Y-BOCS score is 21.92 which falls in moderate OCD.

Fineberg (2003) reported Mean severity score on Y-BOCS scale was 16±7.2. He divided his patients as per the severity as following.

0 – 7	= 2
8 – 15	= 7
16 – 23	= 5
24 – 31	= 1
32 – 40	= 1

Okasha (1994), in his study reported 71% of patients having severe symptoms of OCD on Y-BOCS scale.

4. SUMMARY AND COMCLUSION

In this prospective study of “phenomenology of obsessive compulsive disorder”, all the patients visiting the Psychiatry Department of G.G.Hospital, Jamnagar as an outdoor patient basis were screened for the obsessive compulsive disorder and later co-morbidity and severity of the disorder were judged.

The data were tabulated and analysed. Summary and conclusion of results are as follow.

1. Most common obsession present was obsession of contamination (60%) followed by aggression (40%) need for symmetry (34%), sexual obsession (28%) religious obsession (26%) and pathological doubt (24%) in order of frequency of occurrence.
2. Most common compulsion was compulsive washing and cleaning (60%) followed by Repeating Rituals (46%) Ordering (34%), Checking (22%), and compulsive Hoarding (2%) in order for frequency.

3. There was no deference found between washer and checker subgroup.
4. Mean age of onset of symptoms of OCD was 20.8 years. male (19.8 yrs) had earlier age of onset than females (22 years). No statistically significant differences were found between early v/s. late onset group.
5. Mean duration of untreated period of OCD was 7.88 % years. this reflects that patients with OCD don't take treatment for longer period of time.
6. Most common co-morbidity in patients with OCD was major depressive disorder (44%).
7. OCD with poor insight was present in 8% of patients.
8. 12% of patients with OCD showed presence of suicidal ideation which reflects how severe an obsessive compulsive disorder is.

The study was intended to find the epidemiology, phenomenology, co-morbidity and severity of obsessive compulsive disorder. But to make the results more standardized there should be longitudinal study of large sample size.

Limitation of Study :

1. Short sample size.
2. It's a prospective study and not a longitudinal.

5. REFERENCES

[1] Akhtar S, Wig NN, Varmar VK, Pershad D, Verma S.K (1975): A phenomenological analysis of symptoms in obsessive compulsive disorder. *British Journal of psychiatry* 127: 342-48.

[2] Albert U, Picco C, Maina G, Formigoni F, Aguglia E et al (2002) : Phenomenology of patients with early and adult onset OCD. *Epidemiol psychiatry Soc.*11(2): 116-26

[3] Allen A, Hollander E (2000) : Obsessive compulsive spectrum disorders. *Psychiatric Clinics of North America* (23), 2000.

[4] Angst J, Gamma A, Endrass J, Goodwin R, Ajdacic V et al (2004): Obsessive compulsive severity spectrum in the community : Prevalence, co-morbidity with Bipolar and anxiety syndromes. *Eur Arch Psychiatry Clin Neurosci* 255 (1) : 65-71.

[5] Aouizerate B, Guehl D, Cuny E, Rougier A, Bioulac B et al (2004): Pathophysiology of obsessive compulsive disorder: a necessary link between phenomenology, neuropsychology, imagery and physiology. *Prog Neurobiol* 72 (2) : 195-221.

[6] Arnold D, Margaret A. (2001): Is obsessive compulsive disorder an autoimmune disease? *CMAJ* 165 (10).

[7] Bear L, Rauch S, Ballantine H, Martuza R, Cosgrove R et al (1995): Cingulotomy for intractable obsessive compulsive disorder: prospective long term follow-up of 18 patients. *Archives J Psychiatry* 52(5).

[8] Benjamin J. Sadock, Virginia A. Sadock (2003): Synopsis of psychiatry of Kaplan Sadock 9th edn. Lippincott Williams & Wilkins Publication.

[9] Benjamin J. Sadock, Virginia A. Sadock (2004) : The comprehensive textbook of psychiatry by Kaplan Sadock 8th edn. Lippincott Williams & Wilkins Publication.

[10] Bhattacharya S, Prasanna CL, Khanna S., Sheshadri S (2005): Family genetic study of clinical subtypes of OCD: *psychiatry genet* 15 (3): 175-80.

[11] Bhattacharya, Janardhan Reddy YC, Khanna S (2005): Depressive and anxiety disorder co-morbidity in obsessive compulsive disorder *psychopathology* 38: 315-319.

[12] Black DW, Monohan PO, Clancy GP (1997): Hoarding Predicts poor response in OCD. *American Psychiatry association, San Diego, CA.*

[13] Blenvenu OJ, Samuels JF, Riddle MA (2000): The relationship of obsessive compulsive disorders to possible spectrum disorder: Result from a family study. *Biol psychiatry* 48 (4): 287-93.

[14] Chabone N, Oelome R, Millet B, Mouren MC, Leboyer M et al (2005): Early onset OCD : a subgroup with specific clinical & familial pattern. *J child psycho psychiatry* 46 (8); 881-87.

[15] Chia BH (1996): Singapore study of obsessive compulsive disorder. *Singapore Med* 37(4): 402-6.

[16] Dale RC, Heyman I, Giovannoni G, Church AW (2005): Incidence of anti-brain antibodies in children with obsessive compulsive disorder. *Br J Psychiatry* 187 : 314-19.

[17] Delome R, Golmard JL, Chabana N, Millet B, Krebs MO et al (2005) : Admixtute analysis of age of onset in OCD. *Psychol, Med* 25(2); 237-43.

[18] Diagnostic statistical manual of mental disorder, 4th ed. Text Rev. Washington DC: American Psychiatric Association.

[19] Dowson JH (1977) : The phenomenology of severe obsessive compulsive neurosis. *The British Journal of Psychiatry* 131: 75-78.

[20] Egrilmez A, Gulseren L, Gulseren S, Kultur S (1997) : Phenomenology of obsessions in Turkish Series of OCD patients. *Psychopathology* 30 (2): 106-10.

[21] Eisen JL, Goodman WK, Keller MB, Warshaw MG, Demarco LM et al (1999): Patterns of remission and relapse in obsessive compulsive disorder: a 2 year prospective study. *J Clin psychiatry* 60 (5): 346-51.

[22] Esen JL, Ramsussen SA (1993): Obsessive compulsive disorder with psychotic features. *J Clin Psychiatry* 54 : 373-9.

[23] Faravelli C, Guerrini Degl, Innocenti B, Giardinelli L (1989): Epidemiology of Anxiety disorder in Florence. *Acta Psychiatry Scand* 79(4): 308-12.

[24] Fineberg A, Rajgopal S, Bauks A (2003): How common is OCD in dermatology clinic. *J. Clin Psy* 64(2):152-55.

[25] Fireman B, Koran L, Leventhal J, Jacobson A (2001): The prevalence of clinically recognized obsessive compulsive disorder in a large Health Maintenance organization. *Am J Psychiatry* 158: 1904-10.

[26] Foa EB, Kozak MJ, Goodman WK, Hollander E, Jenike MA et al (1995): DSM-IV field trial : obsessive compulsive disorder: *Am J Psychiatry* 152(4): 654.

[27] Freeman MP, Freeman SA, McElroy SL (2002) : The co-morbidity of bipolar and anxiety disorders: prevalence, psychobiology and treatment issues, *Journal of Affective disorders* 68: 1-23.

- [28] Girishchandra BG, Khanna S (2001): Phenomenology of obsessive compulsive disorder: A factor analytic approach : *Indian J Psychiatry* 43(4).
- [29] Goodman WK, Price LH, Rasmussen SA, Mazurek P et al (1989): The Yale-Brown obsessive compulsive scale II: Validity. *Arch Gen Psychiatry* 46:1012-1016.
- [30] Goodman WK, Price LH, Rasmussen SA, Mazurek C, Fleischmann RL et al (1989): The Yale-Brown obsessive compulsive Scale I : Development, use and reliability. *Arch Gen Psychiatry* 46(11).
- [31] Grab HJ, Meyer C, Hapake U, Rumpf HJ, Freyberger HJ et al (2000): Prevalence quality of life and psychosocial function in obsessive compulsive disorder & subclinical obsessive compulsive disorder in Northern Germany. *Eur Arch Psychiatry Clin Neurosci*. 250(5) : 262-8.
- [32] Grab HJ, Meyer C, Ulfert H (2001): Lifetime comorbidity of obsessive compulsive disorder and sub clinical OCD in north Germany. *Eur Arch Psychiatry Clin Neurosci* 251 : 130-35.
- [33] Hantouche EG, Bouhassira M, Lancrenon S, Ravilly V, Bourgeois M (1995): Prevalence of obsessive compulsive disorders in large French patient population. *Encephale* 21(5): 571-80.
- [34] Hasler G, Lasalle-Ricci VH, Ronquillo JG, Crawley SA, Cochran LW et al (2005) : Obsessive compulsive disorder symptom dimensions show specific relationships to psychiatric co-morbidity. *Psychiatry Res* 135(2) : 121-32.
- [35] Henderson JG Jr, Pollar CA (1988) : Three types of obsessive compulsive disorder in a community sample. *J Clin Psychol* : 44 (5) : 747-52.
- [36] Hetttema JM, Neale MC, Kendler KS (2001) : Review and meta-analysis of the genetic Epidemiology of anxiety disorders. *Am J Psychiatry* 158 (10): 1568-78.
- [37] Husted DS, Shapira NA (2004) : A review of treatment for refractory obsessive compulsive disorder: from medicine to deep brain stimulation. *CNS Spectrum* 9(11) : 933 – 47.
- [38] Jaisooriya RS, Reddy YC, Srinath S (2003) : The relationship of obsessive compulsive disorder to putative spectrum disorders: results from an Indian study. *Compr Psychiatry* 44(4) : 317 – 23.
- [39] Juang YY, Liu CY (2001) : Phenomenology of obsessive compulsive disorder in Taiwan. *Psychiatry Clin Neurosci*. 55 (6) : 623 – 7.
- [40] Karno M, Golding JM : Sorenson SB ; Burnam MA (1988) : The epidemiology of obsessive-compulsive disorder in five US communities. *Arch Gen. Psychiatry* 45 (12) : 1094-99.
- [41] Khanna S (1999) : obsessive compulsive disorder in Vyas JN, Ahuja N, (eds) : *Textbook of Postgraduate psychiatry* Ed (3). New Delhi Jaypee : 263-74.
- [42] Khanna S, Mukharjee D (1992) : Checker and Washers : valid subtypes of OCD. *Psychopathology* 25(5) : 823 – 8.
- [43] Kohn R, Saxena S, Leavay I, Saraceno B (2004): The treatment gap in Mental Health Care. *Bull world Health organ* 82 (11) : 858 – 66.
- [44] Kohn R, Wetlake RJ, Rasmussen SA, RT Marshland, WH Norman (1997) : Clinical features of obsessive compulsive disorder in elderly patients. *Am J Geriatric Psychiatry* 5 : 214 – 215.
- [45] Kolada JL, Bland RC, Newman SC (1994) : Epidemiology of psychiatric disorders in Edmonton. Obsessive compulsive disorder. *Acta Psychiatr Scand Suppl* 376: 24-35.
- [46] Koran LM, Thienemann ML, Davenport R (1996) : Quality of life for patients with obsessive compulsive disorder. *Am J Psychiatry* 153(6) : 783 – 88.
- [47] Leckman JF, Grice DE, Boardman J, Zhang H, Vitale A et al (1997) : Symptoms of obsessive compulsive disorder. *American Journal of psychiatry* 154 (7) : 911-17.
- [48] Lensi P, Cassano GB, Corredù G, Ravagli S, Kunovae JL et al (1996) : Obsessive compulsive disorder familial development history. Symptomatology, co-morbidity and course with special reference to gender related differences. *Br J Psychiatry* 169 (1) : 101 – 7.
- [49] Louchner C, Hemmings SM, Kinnear CJ, Niehaus DJ, Nel DG, Et al (2005): Cluster analysis of obsessive compulsive spectrum disorders in patients with obsessive compulsive disorder: Clinical and genetic correlates. *Compr Psychiatry* 46(1): 14-19.
- [50] Maina G, Alber U, Bogetto F, Vaschetto P, Ravizza L (1999): Recent life events and obsessive compulsive disorder: the role of pregnancy/delivery. *Psychiatry Res* 89 (1) : 49-58.
- [51] Mancbo MC, Eisen JL, Grant JE, Rasmussen SA (2005) : Obsessive compulsive personality disorder and obsessive compulsive disorder. Clinical characteristics, diagnostic difficulties and treatment: *Ann Clin Psychiatry* 17 (4) : 197- 204.
- [52] Mario Do Rasario Campos, Leckman J, Mercadaute M, Gedanke R, Prado S et al (2001): Adult with early onset obsessive compulsive disorder *Am J Psychiatry* 158 : 1899 – 1903.
- [53] Mataix – Cols D, Rauch S, Baer L, Eisen J, Shera D et al (2002) : Symptom stability in adult obsessive compulsive disorder : Data from a naturalistic two year follow-up study. *Am J Psychiatry* 159 : 263 – 68.
- [54] Mataix – Cols D, Rauch S, Manzo P, Jenike P. (1999): Use of factor analysed symptom dimensions to predict outcome with serotonin reuptake inhibitors and placebo in the treatment of OCD. *Am J Psy* 156 : 1409 – 16.
- [55] Matsuna H, Kinike N, Matsui T, Iwaskiy DJ (2001) : Comparative study of clinical features between pure checkers and pure washers category psychiatry res 105(3) : 221 – 9.
- [56] Mc Elroy SL, Philips KA, Keck PE Jr (1994) : obsessive compulsive spectrum disorder. *J Clin Psy* 55 Suppl : 33-51.
- [57] Miguel EC, Coffey BJ, Baer L, Savage CR, Rauch SL et al (1995): Phenomenology of intentional repetitive behaviour in obsessive compulsive disorder and Tourette's disorder. *J Clin Psychiatry* 56 (6) : 245 – 55.
- [58] Mohammadi MR, Ghanizadeh A, Rahgozart M, Noorbala AA, Malekafzali H et al (2005) : Suicide attempt and psychiatric disorders in Iran. *Suicide life threat Behav* 35 (3) : 309 – 16.
- [59] Noshirvani HF, Kavakis Y, Marks IM, Monteiro WO (1991) : Gender Divergent etiological factors in obsessive compulsive disorder. *British journal psychiatry* 158 : 260 – 63.
- [60] Okasha A (2000) : Diagnosis of obsessive compulsive disorder. A review. In M. Marino, A. Okasha, Z. Zohar

- (eds) WPA series of experience and evidence in Psychiatry Vol (4) : 1- 41.
- [61] Okasha A (2004) : OCD in Egyptian Adolescents. The effect of culture and religion. *Psychiatry times XXI* (5).
- [62] Okasha A, Saad A, Khalil AH, Dawla S, Nabil Yehia (1994) : Phenomenology of obsessive compulsive disorder : A transcultural study. *Comprehensive psychiatry* 35(3) : 191-97.
- [63] Omori IM, Murata Y, Uamanish T, Nakaati S, Akehi T et al (2006) : The differential impact of executive attention dysfunction in OCD patients with checkers symptoms Vs those with washing symptoms. *J Psychiatr Res* 2006 July 4.
- [64] Overbeek T, Schruers K, Vermettn E, Griez E (2002) : Co-morbidity of obsessive compulsive disorder and depression : prevalence, symptom severity & treatment effect. *J. Clin. Psychiatry* 63 912) : 1106-12.
- [65] Pollitt JD (1957) : Natural history of obsessional states. *Br. Med. J.* (1957) 194-198.
- [66] Prasad's classification of social class revised 2000-2001.
- [67] Rapoport JL (1989) : Obsessive compulsive disorder children & adolescents Washington DC American Psychiatric Association : 1989.
- [68] Rapoport JL (1989) : The neurobiology of obsessive compulsive disorder. *JAMA* (260) : 2889.
- [69] Rasmussen SA, Eisen JL (1990) : Epidemiology of Obsessive Compulsive disorder : *J Clin Psychiatry* 51 Suppl : 10-3.
- [70] Rasmussen SA, Eisen JL (1994) : The epidemiology and differential diagnosis of obsessive compulsive disorder. *J Clin Psychiatry suppl* 55 : 5-10.
- [71] Rasmussen SA, Tsunag TM (1986) : Clinical characteristics and family history in DSM – III obsessive compulsive disorder. *Am J Psychiatry* 143 (3): 317-322.
- [72] Reza M, Ghanizadeh A, Mehdi R, Noorbala A, Davidian H et al : Prevalence of obsessive compulsive disorder in Iran. *BMC psychiatry* volume 4.
- [73] Rocco C, Slade T, Gavin A (2005) : The changing prevalence & severity of obsessive compulsive disorder criteria from DSM – III to DSM-IV : *Am J Psychiatry* 162 : 876 – 882.
- [74] Sasson Y, Zohar J, Chopra M, Lustig M, Iancu I et al (1997) : Epidemiology of obsessive compulsive disorder : a world view. *J Clin Psychiatry* 58 (12) : 7-10.
- [75] Shashikant Jha (2004) : Yale-Brown obsessive compulsive Scale (Y-BOCS) CNS forum 2004.
- [76] Simeon D, Hollander E, Stein DJ, Cohen L, Aronowitz B (1995) : Body dysmorphic disorder in the DSM-IV field trial for obsessive compulsive disorder. *Am J Psychiatry* 152 (8) : 1207-9.
- [77] Skooq G, Skooq I (1999) : 40 years follow up of patients with obsessive compulsive disorder. *Arch Journal of Psychiatry* 56 (2) : 121-27.
- [78] Sobin C, Blundell M, Weiller F, Gavigan C, Himan C et al (1999) : Phenotypic characteristics of obsessive compulsive disorder ascertained in adulthood. *J Psychiatr Res.* 33 (3) : 265 – 73.
- [79] Stekette G, Eisen J, Dyck I, Warshaw M, Rasmussen S (1999) : Predictor of course in Obsessive compulsive disorder. *Psychiatry Res.* 89 (2) : 229 – 38.
- [80] Swedo SE, Rapoport JL, Leonard H, Lenane M, Cheslow D (1989) : Obsessive compulsive disorder in children and adolescents : Clinical phenomenology of 70 cases. *Arch Gen Psychiatry* 46 (4) : 335 – 41.
- [81] Tezcan E, Millet B (1997) : Phenomenology of obsessive compulsive disorders: Forms and characteristics of obsessions and compulsions in East Turkey. *Encephale* 23 (5) : 342-50.
- [82] Tukul R, Ertekin E, Batmar S, Alyamal F, Sozen A et al (2005) : *Depress anxiety* 21 (3) : 112 – 7.
- [83] Venkatasubramaniam G, TC Ramesh Kumar, Khanna S (2001) : Obsessive compulsive disorder and psychosis : *Can J Psychiatry* 46 : 750-754.
- [84] Weiss MM, Bland RC, Canino GJ, Greenwald S, Hwu HG et al (1994) : The cross national epidemiology of obsessive compulsive disorder : The cross national collaborative grou. *J Clin Psychiatry* 55 Suppl : 5-10.