

## GENDER AND PSYCHOPATHOLOGY IN OBSESSIVE COMPULSIVE DISORDER

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*SUMMARY: The gender difference in OCD was studied in 52 patients attending the psychiatric OPD and it was found that 35 (67.30%) patients were males compared to 17 (32.70%) females, which constituted 0.72% and 1.03% of the male and female patients attending the OPD during the study period, respectively. Hence, in spite of the male preponderance in the study sample, it might not reflect the true prevalence of the disorder in the community.*

*The age of onset for males was lower than that for females, but it did not reach statistical significance. The mean duration of illness for the entire sample was  $7.48 \pm 7.66$  years. The mean duration was found to be significantly longer for females compared to males. The females had higher obsessive, compulsive and total scores on YBOCS indicating a more severe psychopathology. All female patients had compulsions compared to 25.71% males who had no compulsions.*

*Females had increased frequency of obsessive rumination with obsessions of dirt and contamination along with compulsive washing. An interesting finding was that obsessive imagery with obsessions of sex and religion along with repeating rituals were found exclusively in males.*

*A high celibacy rate was found amongst the males. There was no difference in the family history between the males and females.*

*Key words : Gender, Psychopathology, Obsessions, Celibacy rates.*

### INTRODUCTION :

There are five dimensions of sexual differentiation i) the genetic, ii) the genital, iii) the neuro-organisational, iv) the non genital morphological and v) the behavioural. Each of these dimensions can contribute to differences between men and women in the prevalence and severity of diseases (Seeman, 1985). Various gender differences have been reported in obsessive compulsive disorder (OCD), like the slight female preponderance in clinical samples (Ingram, 1961 and Rasmussen & Tsuang, 1984), the earlier age of onset in males (Rasmussen & Tsuang, 1986; Rasmussen & Eisen, 1988, 1990 and 1992), the increased celibacy rates in males (Ingram, 1961; Lo, 1967; Hare et al, 1972) and the differences in certain aspects of psychopathology (Dowson, 1977; Roy, 1979; Rachman & Hodgson, 1980; Reed, 1985 and Rasmussen & Tsuang, 1986). Most of the above findings have been incidental

and only a few studies have specifically addressed this issue of gender differences in OCD.

### MATERIAL & METHODS :

All patients attending the out patient department (O.P.D.) of the Central Institute of Psychiatry, Kanke, Ranchi, between August 1992 and July 1994 were screened for a diagnosis of OCD. The history was recorded in a semistructured proforma and diagnosis was made according to ICD 10(WHO, 1992). Patients who had been diagnosed to have OCD were rediagnosed using DSM-III R criteria (APA, 1987) and only those who fulfilled the criteria were included in the study.

Patients with any history suggestive of organicity, past history of an affective episode (mania or depression) or those who also fulfilled the criteria for schizophrenia were excluded from the study.

The patients were assessed on the Yale

Brown Obsessive and Compulsive Scale (YBOCS) (Goodman et al, 1989) at the first contact.

**RESULTS :**

Out of a total sample of 52, 35 (67.30%) patients were males and 17 (32.70%) patients were females.

The mean age of onset of illness was 21.31±8.50 years for males compared to 24.82±7.89 yrs. for females (p = NS)

In males, the mean duration of illness was 5.86±6.32 years compared to 10.82±8.97 years in females ( p < 0.05). The mean duration for the entire sample was 7.48±7.66 years.

19 (54.29%) males were single compared to 4 (23.53%) females (p<0.05).

When family history of psychiatric illness was compared, it was found that 17(48.57%) of the males has a positive history of some psychiatric illness compared to 10(58.82%) of females (p = NS).

**TABLE I** FAMIL HISTORY OF PSYCHIATRIC ILLNESS IN THE RELATIVES OF PATIENTS WITH OCD

FAMIL HISTORY	MALES (N=35) %	FEMALES (N=17) %
Positive family history	17 48.57	10 58.82
Negative family history	18 51.43	7 41.18
Family history of more than one psychiatric dis	4 11.43	1 5.88
Family history of ocd	3 8.57	2 11.76
Family history of O.C. traits	6 17.14	2 11.76
Family history of depression	5 14.29	3 17.65
Family history of B.A.D.	3 8.57	2 11.76
Family history of Schizophrenia	2 5.71	1 5.88
Family history of other disorders	3 8.57	1 5.88

The mean obsessive subtotal, compulsive, subtotal and the mean YBOCS total was significantly higher for females compared to males.

**TABLE II**

SCORES ON YBOCS	MALES (N=35)	FEMALES (N=17)	LEVEL OF SIGNIFICANCE
Mean obsessive sub total	12.33±3.49	14.65±2.99	t=1.828 p>0.05
Mean compulsive sub total	9.11±6.07	14.59±2.87	t=3.5918 p>0.01
Mean total	21.83±7.56	29.23±5.78	t=3.6248 p> 0.01

16(94.12%) females had obsessive rumination compared to 24(68.57%) males (p<0.05) and 7(20.0%) males had obsessive images compared to none amongst females (p<0.08). 16(94.12%) males had multiple form of obsession compared to 3(17.65%) females (p<0.05).

**TABLE III** FORM OF OBSESSION

FORM	MALES (N %)	FEMALES (N %)	LEVEL OF SIGNIFICANCE
Rumination	24 68.67	16 94.12	X <sup>2</sup> =2.207 p<0.05
Doubt	15 42.86	4 23.53	X <sup>2</sup> =1.843 p=NS
Image	7 20.0	0 0	Fisher's Exact test (two tail) p<0.08
Impulse	5 14.29	0 0	Fisher's Exact test (two tail) p=NS
Fear	2 5.71	0 0	Fisher's Exact test (two tail) p=NS
Multiple form	16 45.71	3 17.65	X <sup>2</sup> =3.887 p<0.05

NS= Not significant

16(94.12%) females had obsessions of dirt and contamination compared to 24(34.29%) males (p<0.01), whereas 14(40.0%) males had obsessions concerning a sexual theme compared to none in the females (p<0.01).

GENDER AND PSYCHOPATHOLOGY IN OBSESSIVE COMPULSIVE DISORDER

TABLE IV CONTENT OF OBSESSION

CONTENT	MALES		FEMALES		LEVEL OF SIGNIFICANCE
	(N)	(%)	(N)	(%)	
Contamination & Dirt	12	34.29	16	94.12	$\chi^2=16.482$ $p<0.01$
Sexual	14	40.00	0	0	Fisher's Exact test (two tail) $p<0.01$
Inanimate	11	31.43	4	23.53	$\chi^2=0.348$ $p=NS$
Religious	6	17.14	0	0	Fisher's Exact test (two tail) $p=NS$
Aggression	1	2.86	0	0	Fisher's Exact test (two tail) $p=NS$
Multiple content	14	40.00	3	17.65	$\chi^2=2.590$ $p<NS$

NS= Not significant

There were 9(25.71%) males who had no compulsion, whereas all the females had associated compulsions ( $p<0.05$ ). 16 (94.12%) females had washing rituals compared to 11(31.43%) males ( $p<0.01$ ). 7(20%) males had repeating compulsion compared to none in the females. ( $p<0.08$ ).

TABLE V TYPE OF COMPULSION

TYPE OF COMPULSION	MALES		FEMALES		LEVEL OF SIGNIFICANCE
	(N)	(%)	(N)	(%)	
Washing	11	31.43	16	94.12	$\chi^2=18.014$ $p<0.01$
Checking	11	31.43	4	23.53	$\chi^2=0.348$ $p<NS$
Repeating compulsion	7	20	0	0	Fisher's Exact test (two tail) $p=NS$
Counting	1	2.86	0	0	Fisher's Exact test (two tail) $p=NS$
Slowness	1	2.86	0	0	Fisher's Exact test (two tail) $p=NS$
Multiple compulsion	9	25.71	4	23.53	$\chi^2=0.0291$ $p<NS$

NS= Not significant

DISCUSSION :

Our sample consisted of 67.30% males and 32.70% females. This was contrary to the reported preponderance of females in OCD samples (Pollit, 1957; Ingram, 1961; Hare et al. 1972; Black, 1974; Rasmussen & Tsuang, 1984 and Rapoport, 1988). Interestingly, Lo (1967) in a study involving Chinese patients, had reported similar findings with males constituting 72.7% of the sample and females only 27.3% of the sample. Our Indian studies have also shown a male preponderance in OCD samples (Chakravarty and Banerjee, 1975; Dutta, 1979; Khanna et al, 1986 and 1992). However, it has been reported that in large series the gender ratio nearly becomes 1:1 (Yaryura-Tobias & Neziroglu, 1983). To try to understand the reason behind our findings, we decided to calculate the percentage of the male and female patients suffering from OCD during the study period. Interestingly 0.72% of male patients attending the OPD during the study period had OCD compared to 1.03% of females. Hence, inspite of a lower proportion of females in the study sample a higher percentage of female patients came for consultation for OCD. This could point towards the fact that hospital samples are not truly representative of the real prevalence in the community as has also been shown in the E.C.A. study (Karno et al, 1988). We agree with what Reed (1985), had opined, that the difference in sex ratio seen in OCD may actually reflect the diagnostic referral practices or some especial factors like hospital bed availability.

The mean age of onset of illness was found to be lower for males as has been reported earlier (Har et al, 1972; Rapoport & Flament, 1985; Rasmussen & Tsuang, 1986; Rasmussen & Tsuang, 1986; Rasmussen & Eisen, 1988, 1990, 1992 and Khanna et al, 1986). However, it did not reach statistical significance. More over the age of onset was slightly later for both sexes in our sample.

The average duration of illness in OCD is long as patients generally present late for treat-

ment (Pollit, 1957; Yaryura-Tobias & Neziroglu, 1983; Rasmussen & Tsuang, 1986 and Lelliott et al, 1988). The mean duration of the illness for the entire sample was  $7.48 \pm 7.66$  years, which was similar to that reported by Pollit (1957) and Rasmussen & Tsuang (1986). The interesting findings was that females had a significantly longer duration of illness than males, indicating that they came later for psychiatric consultation compared to males. This finding was contrary to the earlier findings of Khanna et al (1986).

In OCD, more patients are found to be single, which is more than would be expected for age-related controls (Black, 1974; Roy, 1979 and Yaryura-Tobias & Neziroglu, 1983). In our study significantly more males were single compared to females, which was unlike the findings of Akhtar (1978), but similar to the findings of Ingram (1961); Hare et al (1972); Manchanda et al (1978), Dutta (1979) and Khanna et al (1986).

There was no difference in the family history amongst the first and second degree relatives of males and females. In both groups, the common disorder found in the relatives, were depression, obsessive compulsive traits, OCD, bipolar disorder and schizophrenia. Though our findings did not show any gender differences, a high incidence of various types of psychiatric anomalies, was observed in the relatives as has been reported earlier (Lewis, 1936; Brown, 1942; Rosenberg, 1968; Templer, 1972 and Rasmussen & Tsuang, 1986).

The female patients had higher obsessive and compulsive symptoms at first contact. Another significant finding was that all the female patients had compulsions compared to 28.57% males who did not have any compulsions. It may not be too far fetched to presume that the presence of compulsions might have been an important factor behind seeking help in the case of females, as it would have definitely interfered with their occupational or domestic functioning. This could also explain the longer mean duration of illness and the more severe psychopathology observed in them.

In our sample significantly more females had obsessive rumination unlike the findings of Akhtar et al (1978), whereas obsessive imagery was exclusively found in males. Similarly more females had obsessions of dirt and contamination, which was consistent with earlier reports by Dowson (1977); Akhtar et al (1978); Rachman & Hodgson (1980) and Rasmussen & Tsuang (1986). On the other hand sexual and religious obsessions were exclusively noted in males. Obsessions with a sexual content has been reported to be more in males (Roy, 1979), but we are not aware of any study that has reported an excess of religious obsessions in males. Interestingly, the obsessive images which was observed only in males were found to exclusively involve either a religious or sexual content. Significantly more females had washing rituals which was also similar to earlier reports by Dowson (1977); Rachman & Hodgson (1980), Rasmussen & Tsuang (1986) and Khanna et al (1992). An interesting but intriguing finding was that repeating compulsions were found in 20% of males compared to none in the females, which again is a finding that has not been reported elsewhere to the best of our knowledge, and it requires further replication.

In conclusion, it can be said that though males are over represented in hospital samples, it does not reflect the reality as a higher proportion of female patients sought consultation for OCD as compared to males. Female patients presented later for treatment which could have been a reason for more severe symptoms in them. The presence of compulsion in all the female patients might indicate that functional impairment could have been an important factor behind seeking consultation. Vlassoff and Bonilla (1994) had commented that women often deny their symptoms until they are too severe to ignore or their feelings of guilt, when illness prevents them from fulfilling their expected care-giving role in the household, becomes too intense. Furthermore, Von Zerzen & Weyerer (1982) state that women suffer discrimination because roles identified with female gender are not valued in social and eco-

nomie terms. Those who perform domestic and child care work in their own homes are frequently regarded as "unemployed".

Certain findings like the absence of obsessive images and obsessions with sexual and religious content in females should be viewed with caution as the patients were assessed only once, and knowing the embarrassing nature of such obsessions, they might not have revealed them at the first contact. Secondly, because of the small number of patients with such obsessions, these findings require further replication before they can be generalised.

### REFERENCES :

- Akhtar, S** (1978) Obsessional neurosis, marriage, sex and fertility: some transcultural comparisons. *International Journal of Social Psychiatry*, 24, 164-166.
- Akhtar, S; Wig, NN; Varma, VK; Pershad, D and Verma, SK** (1978) Socio-cultural and clinical determinants of symptomatology in obsessional neurosis. *International Journal of Social Psychiatry*. 24, 157-162.
- Black, A** (1974) The natural history of obsessional neurosis. In H.R. Beech (ed). *Obsessional States*. London Methuen.
- Brown, FW** (1942) Heredity in the psychoneurosis. *Proceedings of the Royal Society of Medicine*. 35, 785-790.
- Chakravarty, A & Banerjee, G** (1975) Ritual & culture specific neurosis and obsessional state in Bengali culture. *Indian Journal of Psychiatry*. 17, 272-283.
- Dowson, JH** (1977) The phenomenology of severe obsessive-compulsive neurosis. *British Journal of Psychiatry*. 131, 75-78.
- Dutta, D** (1979) A clinical evaluation of 57 cases of obsessional neurosis. *Indian Journal of Psychiatry*. 21, 316-319.
- Goodman, WR; Price LH; Rasmussen, SA; Mazure, C; Fleischmann, R L; Heninger, G R & Charney, D S** (1989) The Yale Brown obsessive compulsive scale. I. Development, use and reliability. *Archives of General Psychiatry*. 46, 1006-1011.
- Hare, E H; Price, J S & Slater E T O** (1972) Fertility in obsessional neurosis. *British Journal of Psychiatry*. 121, 197-205.
- Ingram I M** (1961) Obsessional illness in mental hospital patients. *Journal of Mental Science*. 107, 383-402.
- Karno, M; Golding, J M; Sorenson, S B; Burnam, M A** (1988) The epidemiology of obsessive-compulsive disorder in five U.S. communities. *Archives of General Psychiatry*. 45, 1094-1099.
- Khanna, S; Rajendra, PN & Channabasavanna, SM** (1986) Sociodemographic variables in obsessive compulsive neurosis in India. *International Journal of Psychiatry*. 32, 47-55.
- Khanna, S; Mukherjee, D** (1992) Checkers and washers: valid subtypes of obsessive compulsive disorder. *Psychopathology*, 25: 283-288.
- Lelliott, P T; Noshirvani, H F; Basoglu, M; Marks, I M & Monerio, W O** (1988) Obsessive-compulsive beliefs and treatment outcome. *Psychological Medicine*. 18, 697-702.
- Lewis, A** (1936) Problems of obsessional illness. *Proceedings of the Royal Society of Medicine*. 29, 325-326.
- Lo, W H** (1967) A follow-up study of obsessional neurotics in Hong Kong Chinese. *British Journal of Psychiatry*. 113, 823-832.
- Manchanda, R; Sethi, B B & Gupta, S C** (1978) obsessive compulsive neurosis in northern India. *Indian Journal of Psychiatry*. 20, 183-187.
- Pollit, J** (1957) Natural history of obsessional states. *British Medical Journal*. 1, 195-198.
- Rachman, S & Hodgson, R** (1980) *Obsessions and compulsions*. Prentice Hall, Englewood Cliffs. New Jersey.
- Rapoport, J L & Flament, M** (1985) Psychobiology of childhood OCD. In *Abstracts of the World Congress of Biological Psychiatry* (Abstract 119.1) pp 31. Philadelphia.

- Rapoport, J L** (1988) The neurobiology of obsessive-compulsive disorder. *Journal of the American Medical Association*. 260, 2888-2890.
- Rasmussen, S A & Eisen, J L** (1988) Clinical and epidemiological findings of significance to neuropharmacological trials in OCD. *Psychopharmacological Bulletin*. 24, 466-470.
- Rasmussen, S A & Eisen, J L** (1992) The epidemiology and clinical features of obsessive compulsive disorder. *Psychiatric Clinics of North America*. 15, 743-758.
- Rasmussen, S A & Tsuang, M T** (1984) The epidemiology of obsessive compulsive disorder. *Journal of Clinical Psychiatry*. 45, 450-457.
- Rasmussen, S A & Tsuang, M T** (1986) Clinical characteristics and family history in DSM-III obsessive compulsive disorder. *American Journal of Psychiatry*. 143, 317-322.
- Reed, G F** (1985) The natural history of obsessional disorder. In *obsessional experiences and compulsive behaviour: a cognitive-structural approach* (ed) Reed G F. Toronto-Academic Press, Inc. pp 65-66.
- Rosenberg, C M** (1968) Complications of OCD. *British Journal of Psychiatry*. 114, 477-478.
- Roy, A** (1979) Obsessive-compulsive neurosis: phenomenology outcome and a comparison with hysterical neurosis. *Comprehensive Psychiatry* 20, 528-531.
- Seeman, M V** (1985) Sex and schizophrenia. *Canadian Journal of Psychiatry*. 30, 313-315.
- Templer, D I** (1972) the obsessive-compulsive neurosis: Review of research findings. *Comprehensive Psychiatry*. 13, 375-383.
- Vlassoff, C & Bonilla, E** (1994) Gender related difference in the impact of tropical diseases on women: What do we know? *Journal of Biosocial Science*. 26, 37-53.
- Von Zersen, D; Weyerer, S** (1982) Sex differences in rates of mental disorders. *International Journal of Mental Health*. 11, 9-45.
- Yaryura-Tobias, J A; Neziroglu, F & Bergman, L** (1979) clomipramine for obsessive compulsive neurosis. *Current Therapy and Research*. 20, 541-547.

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