Indian J. Psychiat., 1993, 35(4), 200-202

A STUDY OF SOMATIZATION DISORDER IN AN INDUSTRIAL HOSPITAL

G.HARIHARAN, A.N.RAMAKRISHNAN, N.MATHRUBOOTHAM

SUMMARY

A group of psychiatric outpatients who satisfied the DSM-IIIR criteria for Somatization Disorder (n=33) were compared with a group of other Somatisers (n=32). The results show that somatization disorder was found predominantly in females. Their mean age was 31 and they had a lower income and poor educational level, with more life events and stress in the family. The main symptoms were gastrointestinal, cardiopulmonary, pain and conversion followed by menstrual and sexual symptoms. They were more extroverted, neurotic and anxious-depressed with significant basic neurotic traits. These results are discussed.

INTRODUCTION

Somatization is a way of life for some individuals. Cultural belief, socio-economic status and educational background have a bearing in somatising or psychologizing illness behaviour. Individuals experience and communicate suffering through bodily symptoms (Lipowski, 1988). These patients may have *Functional somatization*, fulfilling the DSM-IIIR criteria (APA, 1987) or *Presenting somatization*, having psychological disorders with predominant somatic symptoms as in depression or anxiety or *Somatic preoccupation* as is seen in Hypochondriasis (Kirmayer & Robins, 1991)

MATERIAL AND METHODS

Those patients from the Railway Hospital, Perambur, who presented predominantly with somatic symptoms having no organic basis, referred from the medical outpatient department after investigation, during the period January to June 1992, were included in the study. On examination, it was found that 33 patients had Somatization Disorders (SD) satisfying DSM-IIIR criteria and 32 had other psychiatric disorders presenting with somatic symptoms (Other Somatisers: OS). Habituation to alcohol and drug abuse were not present in either group.

A semi-structured proforma which elicited information regarding socio-demographic data, symptomatology as covered by DSM-IIIR for the two groups ie., Somatization Disorder (SD) and Other Somatisers (OS) was used. Life events in the preceding year were measured using the scale of Holmes & Rahe (1973). All of them were administered the Hospital Anxiety Depression Scale (HAD), Middlesex Hospital Questionnaire (MHQ) and Eysenck Personality Inventory (EPI). The standardized Tamil versions of MHQ and EPI were used to assess neurotic traits and the personality profile respectively. Hospital Anxiety Depression Scale was administered to measure the state anxiety. This questionnaire was translated into Tamil which was validated by the co-author and a Psychologist well versed in English and Tamil. The socio-demographic data, symptom profile, and the stress score of life events (Life Change Units) and scores of the above mentioned three scales (HAD, MHQ, EPI) were compared.

RESULTS AND DISCUSSION

The Somatisation Disorder group had a lower mean age (31.3 years) when compared to Other Somatisers (35.7 years). There were more people belonging to low income group (27) among SD as compared to OS (21) and lesser number of people were illiterate among SD as compared to OS group. These differences in income and literacy were statistically significant. No specific difference was noticed in the duration of illness between SD and OS (4.1 and 3.8 respectively). Significantly more people among SD had a family history of mental illness (8) when compared to OS (2) (1% significance), whereas there was no significant difference with regard to neurological illness (3 and 2 respectively).

There was a greater genetic predisposition to SD in those who had a positive family history, but the exact nature of mental illness in the family was not known. Among life events, death of a close family member was found to be commonest in both groups. Marital disharmony was more common in the SD group. In both groups, life change units (LCU) belong to the mild category of

Table 1
Personality and Psychological Variables

Personality Variables	SOM DIS Mean	SOM DIS Std. Dev.	OTH SOM Mean	OTH SOM Std. Dev.	t	p
EPI						
E	13.45	2.17	11.25	2.50	3.75	<0.001
N	17.94	3.67	16.44	4.13	1.53	<0.05
L	5.76	1.17	6.28	1.57	1.52	<0.05
A	9.58	2.94	9.16	3.44	0.52	NS
P	8.03	2.98	6.50	2.90	2.06	<0.025
MHQ						
O	11.18	2.05	10.09	1.92	2.17	<0.025
S	10.06	2.72	9.72	3.48	0.44	NS
D	9.03	3.08	8.56	2.71	1.72	<0.05
H	7.30	3.64	6.41	2.18	1.18	<0.1
HOSPITAL ANXIETY DEPRESSION SCALE						
A	9.52	3.24	8.82	3.91	0.78	NS
D	7.67	2.23	8.06	3.87	0.50	NS

EPI = Eysenck Personality Inventory; MHQ = Middlesex Hospital Questionnaire; E = Extraversion; N= Neuroticism; L = Lie score; A= Anxiety; P = Phobia; O = Obsession; S = Somatization; D = Depression; H = Hysteria; Std. Dev. = Standard Deviation; SOM DIS = Somatization Disorder; OTH SOM = Other Somatizers.

Table 2
Symptoms

Personality Variables	SOM DIS Mean	SOM DIS Std.Dev.	OTH SOM Mean	OTH SOM Std.Dev.	t	p
GIT	3.12	0.99	1.91	1.73	3.46	0.001
Pain	3.03	0.77	2.37	1.12	2.74	0.01
CVS	3.36	0.78	2.56	1.48	2.7	0.01
Conversion	3.66	1.74	2.34	1.52	3.23	0.001
Sexual	1.52	1.12	0.63	1.10	3.22	0.001
Menstrual	1.45	0.90	1.00	1.11	1.85	0.10

SOM DIS - Somatization Disorder; OTH SOM = Other Somatizers

Holmes & Rahe. The total neurotic score was significantly higher in the SD group (SD: mean 55.18, std. dev. 11.46; OS: mean 50.43, std. dev. 8.89; t=1.83, p = <0.05).

The Somatization Disorder group were found to be highly extroverted and neurotic compared to the other somatisers. Anxiety and depression scores were high in both groups. Obsession scores were significantly higher in the Somatization Disorder group; Phobia and Hysterical scores were high, though to a less significant level. (Table 1). Gastrointestinal, Sexual and Conversion symptoms were found to be more in somatization disorder group, as also Cardiovascular and Pain symptoms (Table 2).

In this study, it has been clearly shown that somatization disorder forms a different group when compared to other somatoform disorders and somatisers. Various workers have commented on the preponderance of female sex in somatization disorder (Swartz et al, 1986; De Gruy et al, 1987; Mai & Merskey, 1980). Workers like Guze et al have opined that somatization disorder and conversion disorders in females may contrast with hypochondriasis and personality disorder in males. In this study, both the groups were predominantly females. There was only 1 male in SD and 7 among OS. Concomitant diagnostic entities in Somatization Disorder were Depression (n=1), Anxiety (n=9) and Conversion disorder (n=2). Among Other Somatisers, the following diagnostic entities were seen: Depression (n=8), Dysthymia (n=9), Conversion (n=9), Anxiety (n=3), Adjustment Disorder (n=1) and Psychogenic pain disorder (n=2). According to Lipowski, somatisers belong mainly to the diagnostic categories of anxiety, depression, personality disorder, hypochondriasis, somatization disorders and schizophrenia. There was no case of schizophrenia or hypochondriasis in our group.

According to different workers, somatization disorder starts early in life, presents around 30 years of age with a history of suffering from the illness for a varying number of years (range 1 to 10 years; Morrison, 1990). In our study, apart from conversion disorders, others seem to have developed the illness later. Cultural factors and stigma attached to seeking psychiatric help might have resulted in a higher mean age in both groups at the time of presentation to a psychiatrist. People with isolated conversion syndromes may develop symptoms very early in life, but later on other symptoms may be added and a final diagnosis of somatization disorder may be made later on (Tomasson et al, 1991). Even while taking the mean age at which they present for treatment at Psychiatric OPD, somatization disorder is lower.

In literature it has been noticed that the majority (Escobar et al, 1987; Swartz et al, 1986) of patients with somatization disorder are unmarried or divorced. All patients in our study were married and living with their spouses. In India, girls get married early and divorce is still considered to be taboo. We found more martial disharmony in our group, probably a prelude to divorce.

We have found that Other Somatisers belong to a higher income group as compared to Somatization Disorders which concurs with finding of other authors (Lawrence & Robbins, 1991). Briquet had commented that the class difference may be the result of the illness and not vice versa (Mai & Merskey, 1980). Several authors (Lipowski, 1988; Shapiro & Rosenfeld, 1986; Kelner, 1986) have stressed the role of genetic factors in the causation of Somatization Disorder and developmental learning factors for Other Somatisers. Our study shows more genetic loading in patients with SD.

In somatization disorder, it has been found that one in four female relatives have a similar somatization disorder (Woerner & Guze, 1968) and one among four male relatives have Anti Social Personality Disorder (ASPD) (Morrison & Steward, 1971 & 1973). Other studies link Somatization disorder and ASPD to Attention Deficiency Disorder (ADD) in children. Some psychiatrists believe that somatization disorder and ASPD may be alternate manifestations of the same underlying genetic diathesis (Spalt, 1980). In our study, significantly more somatization disorder patients had a family history of mental illness compared to the other somatisers, but no difference in neurological illness. The exact nature of mental illness like ASPD or ADD among the male relatives of the SD group was not available.

Among the seven groups of symptom clusters, it was found that gastrointestinal, conversion and sexual symptoms were more in somatization disorder than other somatisers. In some other studies, the most common presenting symptoms were found to be pain in extremities, back pain, palpitation and chest pain (Chaturvedi et al, 1987; Tomasson et al, 1991). Lloyd (1986) has reported pain in abdomen, chest and hand, dizziness and weakness as the commonest symptoms, but others felt that symptoms related to the heart or neurological symptoms are more frequent and perceived as more serious when compared to headache, weakness and pain (Chaturvedi et al, 1987). Even though it was not a part of the diagnostic criteria, many patients complained of headache as a disturbing symptom which occurs frequently. This has been reported by other workers (Morrison, 1990; Kaminsky & Slaveny, 1983). We feel that it may be worthwhile to include headache as one of the diagnostic criteria for somatization disorder.

Various authors have commented on illness behaviour and stressful life events in somatisers (Chaturvedi & Bhan

dari, 1988; Lazare, 1981). The mean LCU Score in both groups (Som Dis, mean = 94.39, std. dev. = 64.75; Other Somatisers, mean = 118.65, std. dev. = 54.57) was much below the significant levels suggested by Holmes and Rahe. There were no significant differences between the total stress scores or LCU between the test and control groups. It was also found that loss of a close family member was more frequently reported in the Somatisation disorder (SD) group as compared to Other Somatisers (OS) (significant at 1%).

Though both test and control groups scored high on anxiety in HAD scale, there was no difference between the groups with regard to state anxiety. It is pertinent to note in this connection that, as per DSM-IIIR criteria of somatization disorder, affective symptoms (anxiety / depression) have been deleted from the original Briquet's or Perley Guze criteria. Some authors (Tomasson et al, 1991) feel that excluding the affective and anxiety neurosis (panic disorder) symptom from the diagnostic criteria of somatization disorder appears to ignore an important aspect of the syndrome. It is also known that extremes of emotion ranging from 'la belle indifference' (conversion) to extreme panic may be seen in somatisers (Lipowski, 1988).

When trait anxiety was measured by AHQ, total neurotic score was higher in the case of Somatization Disorder as compared to Other Somatisers and they were more extroverted and neurotic. Among the various neurotic traits, obsession and phobia were very high in somatization disorder patients. Similar findings were reported by Kaminsky and Slavney (1983).

In conclusion, our study suggests that Somatization Disorder and Other Somatisers are predominantly married women, with an onset of illness in their teens and belonging to a low income group. There was more family history of mental illness in somatization disorder. The majority presented with gastrointestinal symptoms as a cluster and pain in extremities and back pain individually. Both the groups had similar affective symptoms such as anxiety and depression, though neurotic traits were more in somatization disorder. We feel that headache is also an important part of the diagnostic symptomatology in somatization disorder. Further study with a larger sample and normal controls will throw more light on somatization disorder and somatisers, also taking into account the cultural and social factors affecting their illness behaviour.

REFERENCES

Chaturvedi, S.K. & Bhandari, S. (1989) Somatization and illness behaviour. *Journal of Psychosomatic Research*, 33, 147-153.

Chaturvedi, S.K., Michael, A. & Sarmukaddam, S. (1987) Somatisers in Psychiatric Care. *Indian Journal of Psychiatry*, 29, 4, 337-342.

Guze, S.B., Woodruff, R.A. & Clayton P.J. (1971) Hysteria and antisocial personality disorder: Further evidence of an association. *American Journal of Psychiatry*, 127, 957-960.

Kaminsky, M.J. & Slavney, P.R. (1983) Hysterical and obsessional features in patients with Briquet syndrome (Somatization Disorder). *Psychological Medicine*, 13, 111-120.

Kirmayer, L.J. & Robins, J.M. (1991) Three forms of somatization in Primary Care: Prevalence, Co-occurrence and socio-demographic characteristics. *Journal of Nervous and Mental Disease*, 179, 647-655.

Lipowski, Z.J. (1988) Somatization: The concept and its clinical application. *Australian Journal of Psychiatry*, 145, 1358-1368.

Mai, F.M. & Merskey, H. (1980) Briquets' Treatise on Hysteria. A synopsis and commentary. *Archives of General Psychiatry*, 37, 1401-1405.

Morrison, J. (1990) Managing Somatization Disorder. *Disease a Month*, 36, 542-591.

Morrison, J.R. & Steward, M.A. (1971) A family study of Hyperactive child syndrome. *Biological Psychiatry*, 3, 189-195.

Morrison, J.R. & Steward, M.A. (1973) The psychiatric status of the legal families of adopted hyperactive children. *Archives of General Psychiatry*, 28, 888-891.

Spalt, L. (1980) Hysteria and anti-social personality -A single disorder? *Journal of Nervous and Mental Disease*, 168, 456-464.

Tomasson, K., Kent, D. & Coryell, W. (1991) Somatization and conversion disorder: Comorbidity and demographics at presentation *Acta Psychiatrica Scandinavica*, 84, 288-293.

Woerner, P.I. & Guze, S.B. (1968) A family and marital study of hysteria. *British Journal of Psychiatry*, 114, 161-168.

G.Hariharan[*], *Chief Psychiatrist & Chief Hospital Supdt; A.N.Ramakrishnan, Senior Psychiatrist & Sr. DMO (Admn), Railway Hospital, Madras 600 023; N.Mathrubootham, Honorary Consultant to Railway Hospital & Asst. Professor, Institute of Mental Health, Madras.*

[*] Correspondence