

Research Article

Somatic Symptom Disorder: Study of Medically Unexplained Symptoms

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Abstract: Somatic symptom disorder is new diagnostic category in DSM 5. Somatic symptom disorder (previously known as somatization disorder) is the association of medically unexplained somatic symptoms with psychological distress and health-seeking behavior and is present in at least 10% to 15% in OPD. The aims and objectives were to study medically unexplained symptoms and associated psychiatric co morbid conditions. 50 patients with long standing history of MUS were evaluated by using modified Bradford inventory. The most common symptomatic presentation during last 2 years in this study was feeling of weakness or lack of energy much of the time in both male and female respectively 94.7% and 96.7%, there were symptomatic differences in males and females, but severity of symptoms was higher among females. 13% of female pts had undergone hysterectomy due to persistent gynecological problems during course of illness. 82% pts had illness of more than 2 years. The mean duration of illness at the time of assessment was 6.8 years. Patients presented with somatic symptoms disorder has an another diagnosis in significant cases like Major depressive disorder, anxiety disorder, alcohol use disorder. Medically unexplained symptoms were common among female, but it was not uncommon in male. Patient suffering from Somatic symptoms disorder disorder has very high rate of health care utilization and they perceived themselves as severely ill and remained dissatisfied.

Keywords: MUS-Medically unexplained symptoms, Somatization, BSI-Bradford somatic inventory.

INTRODUCTION

Medically unexplained symptoms (MUS) are 'persistent bodily complaints for which adequate examination does not reveal sufficient explanatory structural or other specified pathology.

The word "somatization" stems from the word soma which refers to the body. Soma is used in the terms somatic (of the body), somatoform (body like) and psychosomatic (the union of the mind and the body).

Somatic symptom disorder (previously known as somatization disorder) is the association of medically unexplained somatic symptoms with psychological distress and health-seeking behaviour and is present in at least 10% to 15%.

Multiple and persisting physical symptoms, with subsequent visits to physicians not finding an organic explanation for the complaints [1]. Multiple somatic symptoms are a predictor of persistency and bad outcome [2]. Medically unexplained symptoms are an important problem in general medicine not only because of their prevalence but also on account of high associated consumption of health service resources.

Patients are often left with a sense of dissatisfaction. There may be a strong association between psychiatric morbidity and physical symptoms irrespective of whether they have a medical explanation or not [3]. Association with depressive and anxiety disorders increases with the number of unexplained symptoms reported [4, 5]

Hariharan *et al.* in their study of somatisation in industrial hospital showed that mean age of presentation was 31.3 years, predominantly in female, depression & anxiety were common comorbidities present [8].

Surgical operations like gastrointestinal and gynaecological operations were being the most frequent in persistent somatization [15].

Recognition of abnormal illness behaviour in somatoform disorders is important in order to avoid unnecessary tests, inappropriate treatment, and to prevent encouragement and reinforcement of abnormal behavior [11, 12].

Indian patients often present with somatic symptoms unlike those from the west as this is culturally accepted manifestation of psychic distress [14].

Firstly, most of the clusters of somatic symptoms show obvious similarities across the cultural divide. Secondly, it would seem that the cross-cultural equivalence of the BSI is greater at the level of factors than at the item level. Thirdly, there are some important differences within the principal symptom clusters between the ethnic groups [16].

Aims and Objectives

To Study medically unexplained symptoms and its associated psychiatric comorbidity.

MATERIALS AND METHODS

Study site

Civil Hospital,Ahmedabad, a tertiary medical center affiliated to medical college

Participants

Fifty Patients attending psychiatry OPD in general hospital were selected on basis of inclusion Criteria, But most of the patients were referred from physicians.

Inclusion criteria

- Patients presented with medically unexplained symptoms(criteria that match diagnostic criteria of somatization disorder) that include 4 bodily pain, 2 gastro intestinal, 1 pseudo neurological and 1 sexual symptoms were selected.
- Patients with long standing illness.

Informed consent was taken and this study was carried out by preformed validated questionnaire.

The questionnaire included demographic data and modified Bradford somatic inventory. The questionnaire was self rated or doctor’s rated in Gujarati language.

Interview was carried out to study pattern of symptoms, course of illness and to find co-morbid psychiatry condition like depression, anxiety acc. to DSM IV. The data was collected and analyzed by applying specific statistical methods.

Modified Bradford somatic inventory

Bradford somatic inventory revised version was found to cover over 90% of somatic symptoms. It consisted of 46-item inventory, two items applying to men only. (No gynaecological symptoms occurred with sufficient frequency to be included.)

In this study Modified Bradford somatic inventory was used, with addition of gynaecological symptoms which are seen frequently enough to get included. Modified BSI consisted of 60 item inventory.

In Bradford somatic inventory three choice format has been used, (a) absent, (b) present on less than 15 days during past month, (c) present on more than 15

days during past month. We have added another category in those symptoms has been present in past 2 years for more evaluation about illness.

RESULTS AND DISCUSSION

Table 1: Sociodemographic characteristics

Patients characteristic	N=50(%)
Age	
26-35	21(42)
36-45	19(38)
>45	10(20)
Sex	
Male	19(38)
Female	31(62)
Marital status	
Single	03(6)
Married	42(84)
Widow	03(6)
Divorced	02(4)
Occupation	
Professional	00
Semi-professional	01(2)
Clerical/shop owner/farmer	02(4)
Skilled worker	03(6)
Semi-skilled worker	02(4)
Unskilled worker	16(32)
Unemployed	26(52)
Unemployed Housewife	06(12) 20(40)
Education	
Graduate or post graduate	01(2)
Post high school diploma	01(2)
High school	06(12)
Middle school	06(12)
Primary school	16(32)
Illiterate	20(40)
Family income	
>19575	01(2)
9798-19574	05(10)
7323-9797	07(14)
4891-7322	15(30)
2936-4893	17(34)
980-2935	05(10)
Religion	
Hindu	47(94)
Muslim	03(6)
Family type	
Nuclear	36(72)
Joint	14(28)
Locality	
Urban	21(42)
Rural	29(58)

Age of patients ranged from 26 to 56 years with a mean age of 38.6 years. 62% were females, married (84%), Hindu (94%), illiterate (40%). Most of the patients were unemployed (52%),unskilled worker (32%).72% belonged to nuclear families. This finding was in accordance with similar finding in study

conducted by IPS Grover *et al.*, reported in study of phenomenology of functional symptoms in depression that the mean age was 38.45 years, equal gender distribution, majority of the patients were married(74.7%),nuclear families(67.8%) [9].

In study by Nambi *et al.* [10] reported similar finding. Somatic symptom disorder is reported to be more common in women, younger age onset usually before 30 and those from lower socio economical class [6, 7].

Table 2: Symptomatic presentation in female

Sl. No.	Symptoms	In last 2 years N=31 (%)	Sl. No.	Symptoms	In last 2 years N=31 (%)
1	Lack of energy or weakness	30(96.7)	30	Bloating of stomach	13(41.2)
2.	Severe headache	25(80.6)	31	Pain in chest or heart	12(38.7)
3	Feeling heat inside body	25(80.6)	32	Nausea	12(38.7)
4	Dryness of mouth	24(77.4)	33	Excessive menstrual bleeding	7(31.8)
5	Feeling of pins or numbness in hands	24(77.4)	34	Burning sensation in eyes	11(35.5)
6	Heaviness in the body	24(77.4)	35	Impaired coordination or balance	10(32.3)
7	Feeling of tired without working	23(74.2)	36	Feeling of something moving in stomach	8(25.8)
8	Irregular menstruation	14(63.6)	37	Palpitation or heart pounding	7(22.6)
9	Pain in neck and shoulders	22(71)	38	Burning micturation	7(22.6)
10	Backache	22(71)	39	Feeling of cold in hands or feet	7(22.6)
11	Tingling all over the body	22(71)	40	Sweating a lot	6(19.4)
12	Pain in legs	21(67.7)	41	Tightness or pressure over chest(heart)	6(19.4)
13	Burning sensation in head	20(64.5)	42	Passing urine more frequently	6(19.4)
14	Bitter taste in mouth	20(64.5)	43	Burning or itching all over skin	5(16.1)
15	Painful menstruation	12(54.5)	44	Excessive sweating in palms	5(16.1)
16	Pain all over body	19(61.3)	45	Pain during sexual intercourse	5(16.1)
17	Dizziness or giddiness	19(61.3)	46	Unusual vaginal discharge	5(16.1)
18	Burning sensation in stomach	18(58.1)	47	Weakness or sinking of heart	4(12.9)
19	Heaviness in head	18(58.1)	48	Pain during urination	4(12.9)
20	Constipation	18(58.1)	49	Diarrhoea	3(9.7)
21	Gas trouble or bleching	17(54.8)	50	Hearing a buzzing noise in ear or head	3(9.7)
22	Feeling of constriction of head	16(51.6)	51	Choking sensation in throat	2(6.5)
23	Feeling of darkness or mist in eyes	16(51.6)	52	Difficulty in breathing even when resting	2(6.5)
24	Feeling like head going to burst	16(51.6)	53	Difficulty in swallowing as feeling of lump in throat	2(6.5)
25	Joint pain	16(51.6)	54	vomiting	2(6.5)
26	Sexual indifferences	16(51.6)	55	Regurgitation of food	2(6.5)
27	Indigestion	15(48.4)	56	Pain in the anus	0
28	Discomfort or ache in stomach	14(45.2)	57	Flushing over face	0
29	Trembling or shaking	13(41.2)	58	Painful breathing or hyperventilation	0

Table 3: Symptomatic presentation in males

Sl. No.	symptoms	In last 2 years N=19 (%)	Sl. No.	symptoms	In last 2 years N=19(%)
1	Lack of energy or weakness	18(94.7)	29	Excessive sweating in palms	6(31.6)
2	Indigestion	14(73.7)	30	Weakness or sinking of heart	6(31.6)
3	Feeling of tired without working	13(68.4)	31	Trembling or shaking	6(31.3)
4	Tingling all over the body	13(68.4)	32	Feeling of constriction of head	5(26.3)
5	Sexual indifferences	13(68.4)	33	Sweating a lot	5(26.3)
6	Burning sensation in stomach	12(63.2)	34	Heaviness in the body	5(26.3)
7	Pain in legs	12(63.2)	35	Feeling of darkness or mist in eyes	4(21.1)
8	Severe headache	11(57.9)	36	Difficulty in breathing even when resting	4(21.1)
9	Discomfort or ache in stomach	11(57.9)	37	Dizziness or giddiness	4(21.1)
10	Feeling of pins or numbness in hands	11(57.9)	38	Bitter taste in mouth	4(21.1)
11	Constipation	11(57.9)	39	Hearing a buzzing noise in ear or head	4(21.1)
12	Gas trouble or bleching	11(57.9)	40	Painful breathing or hyperventilation	4(21.1)
13	Pain all over body	10(52.6)	41	Passing of semen in urine	4(21.1)
14	Backache	10(52.6)	42	Diarrhoea	3(15.8)
15	Erectile dysfunction	10(52.6)	43	Feeling of cold in hands or feet	3(15.8)
16	Pain in neck and shoulders	9(47.4)	44	Pain during urination	3(15.8)
17	Dryness of mouth	9(47.4)	45	Burning sensation in eyes	2(10.5)
18	Feeling heat inside body	9(47.4)	46	Feeling like head going to burst	2(10.5)
19	Passing urine more frequently	9(47.4)	47	Pain in the anus	2(10.5)
20	Pain in chest or heart	8(42.1)	48	Flushing over face	2(10.5)
21	Burning sensation in head	8(42.1)	49	Burning or itching all over skin	1(5.3)
22	Tightness or pressure over chest(heart)	8(42.1)	50	Choking sensation in throat	1(5.3)
23	Bloating of stomach	8(42.1)	51	Burning micturation	1(5.3)
24	Heaviness in head	8(42.1)	52	Pain during sexual intercourse	1(5.3)
25	Nausea	7(36.8)	53	vomiting	1(5.3)
26	Joint pain	7(36.8)	54	Regurgitation of food	1(5.3)
27	Feeling of something moving in stomach	6(31.6)	55	Impaired coordination or balance	1(5.3)
28	Palpitation or heart pounding	6(31.6)	56	Difficulty in swallowing as feeling of lump in throat	0

The most common symptomatic presentation during last 2 years (symptoms present in last one month only were excluded) in this study was feeling of weakness or lack of energy much of the time in both male and female respectively 94.7% and 96.7%, besides this there were symptomatic differences in male and female (Table 2 & 3).

A study by Grover *et al* on functional somatic symptoms in depression were similar result like lack of energy (weakness) much of the time (76.3%), severe headaches (74%), feeling tired even when not working (71%), head feeling heavy (59.1%), mouth or throat getting dry (55.2%), aches and pains all over the body (55.4%), pain or tension in neck and shoulders (54.1%), head feeling hot or burning (53.9%), feeling of heat inside body (48%) and feeling giddy or dizzy (46.2%) [9].

In Gautam *et al.* [18] study of psychiatric patients with somatic complains, commonest nature of symptoms were headache 81%, weakness 66%.

There were symptomatic differences in males and females, differences in presentation between males and females may be explained by socio cultural variable. There were difference in somatic presentation may be due to culture plays an major role in nature of symptoms [13].

There is evidence for differences in the rates and form of somatization among different cultural groups, the clinical significance of these differences remains unclear [17].

Mumford *et al.* explored using factor analysis of responses by functional patients presenting to medical clinics in Britain and Pakistan. Four principal factors (head, chest, abdomen, fatigue) were similar in both. Indian patients often present with somatic symptoms unlike those from the west as this is culturally accepted manifestation of psychic distress, there are some important differences within the principal symptom clusters between the ethnic groups [16].

There were few symptoms present in the last 1 months only either present less than 15 or more than 15 days in last one month. These symptoms in male were gas trouble (26.3%), constipation (26.3%), nausea (21.1%), pain in chest (15.8%) while in case of female regurgitation of food (25.8%), discomfort in stomach (25.8%), in coordination in balance (22.6%). so gastro intestinal problems were more prevalent in last one month prior to the assessment.

On original BSI items, mean score of symptoms was higher in female as compared to male in the last one month prior to assessment (37.61 vs 30.61, $t=2.0165$, $p=0.0447$). So severity of symptoms was higher among females.

It was found in this study that those symptoms present in last one month prior to the assessment; most of them were present in last 2 years that suggest chronic course of somatic symptom disorder.

We have encountered some other symptoms during study those were not included in modified Bradford somatic inventory, like localized weakness in limb mostly left sided (10%), loss of consciousness (8%), loss of voice (6%), eyes stretching from back (2%) and loss of touch sensation (2%). We had also encountered gynecological problem that significantly occurred like menstrual irregularity (63.6%) and painful menstruation (58.3%).

In contrast Mumford *et al.* [16] excluded gynecological symptoms in their study because of no gynecological problem occurred in sufficient frequency.

In our study 13% of female pts had undergone hysterectomy due to persistent gynecological problems during course of illness.

Out of 30 hysterectomized women 22 uterus had been found normal that suggest that somatization disorder might have been underlying cause of hysterectomy [19].

Table 4: Duration of somatization

Duration of illness N =50(%)			
	Male [N=19(%)]	Female [N=31(%)]	Total [N=50(%)]
Less than 6 months	0	1(3.2)	1(2%)
6-12 months	0	1(3.2)	1(2%)
1-2 years	4(21.1)	3(9.7)	7(14%)
More than 2 years	15(78.9)	26(83.9)	41(82%)

Most of the pts had a long course of illness, 82% pts had illness of more than 2 years. The mean duration of illness at the time of assessment was 6.8 years.

Somatization disorders tends to be chronic. Epidemiological studies have shown that type and number of physical symptoms often change during follow up periods [21].

Table 5: Psychiatric co morbidity

Comorbidity	Male [N=19(%)]	Female [N=31(%)]	Total [N=50(%)]
Major depressive disorder	3(15.8)	14(45.2)	17(34)
Anxiety disorder	2(10.5)	6(19.4)	8(16)
Panic disorder	4(21.1)	2(6.5)	6(12)
Alcohol use disorder	4(21.1)	0	4(8)
Hypochondriasis	1(5.3)	0	1(2)
MDD with panic attack	0	1(3.2)	1(2)

We found that somatic symptoms disorder has co morbid with Major depressive disorder in 45% of female while 16% of male patients, anxiety disorder in 19.4% of female and 10.5% of male patients, alcohol use disorder 21% of male patients.

Fink [22] reported 48% of the persistent somatizers met criteria for alcohol dependence, 46.4% for panic disorder, 30.4% for depression.

Mumford *et al.* [23] found by using Bradford somatic inventory that subjects with high and middle BSI score, this yields a point prevalence of 66% of the women and 25 % of the men suffering from psychiatric disorders. The majority of these disorders (around 70%) were depressive episodes, the remainder being anxiety disorders.

Rief *et al.* [20] found similar high comorbidity of depressive and anxiety disorder in patients of somatoform disorders.

Limitation of the study

- The inferences were drawn from this study are limited by its cross sectional design.
- It was limited to small population, finding of the study needs to be interpreted with caution in view of its sample size.
- Patients of MUS had some concurrent organic disease which might have led to bias to some extent.

SUMMARY AND CONCLUSION

This study was carried out to determine pattern of medically unexplained physical symptoms among psychiatric OPD patients.

Somatic symptom disorder was common among psychiatry patients on basis of modified Bradford somatic inventory, common among female, younger age and lower socioeconomical background but it was not uncommon in male. Symptomatic presentations were different in males and females, may be explained by socio cultural variable. Most of the symptoms present in last one month prior to the assessment; most of them were present in last 2 years that suggest its chronic course.

More than half of the female patients had a gynecological problems like painful menstruation, irregular menstruation. For that they had multiple

consultations to gynecologist, few patients had undergone hysterectomy in younger age. Hysterectomy in such cases may be explained by psychological origins of symptoms rather than had some organic cause.

Patients presented with somatic symptom disorders has another diagnosis in significant cases like Major depressive disorder, anxiety disorder, alcohol use disorder, and hypochondriac variety of somatic complaints.

Unlike somatization disorder, somatic symptom disorder has include excessive thought, feeling and behavior related to somatic symptoms and need to identify such feeling, thought and behavior.

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