International Journal of Research in Medical Sciences
Garala V et al. Int J Res Med Sci. 2014 Aug;2(3):956-962
www.msjonline.org
pISSN 2320-6071 | eISSN 2320-6012

DOI: 10.5455/2320-6012.ijrms20140845

Research Article

Somatization and health seeking behavior

Vishal Garala[1]*, Mehul Brahmbhatt[2], Hemang Shah[1], Ganpat Vankar[2]

[1]Department of Psychiatry, GMERS Medical College and Sola Civil Hospital, Ahmedabad, Gujarat, India
[2]Department of Psychiatry, B. J. Medical College & Civil Hospital, Ahmedabad, Gujarat, India

Received: 18 May 2014
Accepted: 10 June 2014

***Correspondence:**
Dr. Vishal Garala,
E-mail: dr_v_99@yahoo.co.in

ABSTRACT

Background: Somatization is the state of being symptomatic which is not explained medically associated with psychological distress and health-seeking behavior and is present in at least 10% to 15% in OPD.
Methods: 50 patients with long standing history of MUS were evaluated by using modified Bradford inventory.
Results: Somatization was most common in younger age, female and lower socio-economical class. Feeling of weakness or lack of energy much of the time in both male and female respectively 94.7% and 96.7% are the most common symptomatic presentation in Somatization during last 2 years, although there were symptomatic differences in males and females. 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. Most of the patients had visited to multiple consultants and underwent many costly diagnostic procedures for their symptoms .Most of the patients after multiple investigations and consultations were not ready to accept psychological origin of their physical illness and continued to see next practitioner as they remained dissatisfied and distressed. One or more physical illness is the common explanation by physicians. Patients presented with somatization has an another diagnosis in significant cases like Major depressive disorder, anxiety disorder, alcohol use disorder.
Conclusion: Somatization was common among female, but it was not uncommon in male. Patient suffering from somatization disorder has very high rate of health care utilization and they perceived themselves as severely ill and were willing to undergo multiple hospitalizations, diagnostic studies, and operations, remained dissatisfied. Need to strengthened consultation liaison between physician and psychiatrist.

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

INTRODUCTION

Somatization is the association of medically unexplained somatic symptoms for which adequate examination doesn't provide any underlying pathology and associate with psychological distress and health-seeking behaviour and is present in at least 10% to 15%.

Somatization is an important problem in general medicine because of their prevalence and high consumption of health service resources. 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]

Patients are often left with a sense of dissatisfaction. There may be a strong association between psychiatric morbidity and unexplained 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] World Health Organization's study of psychological problems in general health care to examine the relation between somatic symptoms and depression. The range of patients with depression reported 45 to 95 percent (overall prevalence, 69 percent).[6]

Indian patients often present with somatic symptoms unlike those from the west as this is culturally accepted manifestation of psychic distress.[7]

Aims and objectives

1. To Study medically unexplained symptoms.

2. To explore past medical consultations: number and type of physicians consulted, investigation done, treatment received and physician explanation of these symptoms, and patient satisfaction with these consultations.

3. To find any psychiatric co morbid conditions.

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

1. 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.

2. 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. 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.

Screening for somatoform symptoms based on Riff et al. cover other details like first complaints before age 30 years, symptom duration, acceptance of doctor's explanation that the complaints do not have a physical origin, doctor visits due to the symptoms etc.[1,30]

RESULTS

Table 1 shows socio-demographic characteristics.

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

Symptomatic presentations

In this study, The most common symptomatic presentation in somatization during last 2 years (symptoms present in last one month only were excluded) in females were lack of energy or weakness (96.7%), severe headache (80.6%), dryness of mouth (77.4%), feeling of pins or numbness in hands (77.4%), heaviness in the body (77.4%), feeling of tired without working (74.2), irregular menstruation (63.6%), pain in neck and shoulders (71%), backache (71%) and in males were lack of energy or weakness (94.7%), indigestion (68.4%), feeling of tired without working (68.4%),tingling all over the body (68.4%), sexual indifferences (68.4%), burning sensation in stomach (63.2%), pain in legs (63.2%), severe headache (57.9%), discomfort or ache in stomach (57.9%), feeling of pins or numbness in hands (57.9%).[11]

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. We had also encountered gynecological problem that significantly occurred like menstrual irregularity (63.6%) and painful menstruation (58.3%).

Table 1: Socio-demographic 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	06 (12)
Housewife	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)

36% of the patients believed that doctors were not able to find specific cause for their illness.

Most of doctor had advised them that there were no any detectible cause of their symptoms.

Around all male and 90% of the female patients could not accept this fact. All pts had taken medicine for their symptoms. The symptoms have affected daily activities in 90% of the male and 71% of the female patients and symptoms had affected well being severely in 63% of male and 80% in female patients.

Table 2: Symptomatic history.

Symptomatic history	Male [N=19(%)]	Female [N=31(%)]	Total [N=50(%)]
Was the doctor able to find specific cause for your symptoms?	6 (31.6)	12 (38.7)	18 (36)
When the doctor told you that there were no detectable cause of your complaints, could you accept this as a fact?	0	3 (9.7)	3 (6)
Have the symptoms affected your daily activities to a great extent?	17 (89.5)	22 (71)	39 (78)
Did you take medicine because of your symptoms?	19 (100)	31 (100)	50 (100)
Did your first symptoms begin before the age of 30?	10 (52.6)	19 (61.3)	29 (58)
Have the symptoms affected your well being severely?	12 (63.2)	25 (80.6)	37 (74)

Table 3: 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.

Table 4: Treatment history.

	Number of Physician consultations in last 2 years		
	Male [N=19 (%)]	Female [N=31 (%)]	Total [N=50 (%)]
3-6 times	3 (15.8)	8 (25.8)	11 (22%)
6-12 times	6 (31.6)	13 (41.9)	19 (38%)
>12 times	10 (52.6)	10 (32.3)	20 (40%)

Around 78% pts had visited more than 6 times in last 2 years for treatment purpose. In our study 36% patients had been examined by psychiatrist.

Table 5: Type of doctor consulted and investigation done.

	No of pts (%)
Type of doctor consulted	
Gps/General medicine	50 (100)
Surgery	26 (52)
Gynaecology	22 (44)
Psychiatrist	18 (36)
Gastrosurgery	15 (30)
ENT	14 (28)
Ortho	11 (22)
Urosurgery	9 (18)
Ophthalmology	5 (10)
Investigations	
Routine (CBC,RFT,LFT)	50 (100)
ECG	44 (88)
USG	36 (72)
Chest X ray	32 (64)
TVS	18 (36)
CT Scan	12 (24)
Upper GI endoscopy	8 (16)
MRI	6 (12)
ABD X ray	5 (10)
2D Echo	4 (8)
EMG NCV	3 (6)

Table 6: Physician explanation and patient's satisfaction.

Sr. No.	Common explanations by consultants
1	One or more physical illness
2	Denies reality of symptoms or rejection
3	Advise rest and avoid stress
4	Due to heavy workload and social responsibilities
5	Due to lack of enough nutrients in blood.
6	Psychological problems.

Patient's responses to physician's attempt to explain psychological origin behind their physical symptoms were very different, most of them had refused to accept it and some were referred to psychiatrist.

94% patients after multiple investigations and consultations were not ready to accept psychological origin of their physical illness and continued to see next practitioner as they remained dissatisfied.

Psychiatric co-morbidity

We found that somatization has co morbid with Major depressive disorder in female (45%) while in male (16%) patients, anxiety disorder in female (19.4%) and in male (10.5%). Alcohol use disorder 21% of male patients. Diagnosis has been done acc. to DSM IV.

DISCUSSION

Socio-demographic characteristics of the patients suggested somatization disorders are more common at younger age, in female, lower socio-economical background. This finding was in accordance with study conducted by Indian Psychiatric Society in study of phenomenology of functional symptoms in depression.[8] Somatization is reported to be more common in women, younger age onset usually before 30 and those from lower socio economical class.[9,10]

In this study symptomatic presentations are comparable with the 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%).[8] In Gautam et al. study (1977)[12] 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 and differences remains unclear[13,14] 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.[15]

Gynecological problem that significantly occurred like menstrual irregularity (63.6%) and painful menstruation (58.3%), repeated gynecological consultations these complains are remain persistent. In contrast Mumford et al. (1991)[15] 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

hystrectomized women 22 uterus had been found normal that suggest that somatization disorder might have been underlying cause of hysterectomy.[31] Surgical operations like gastrointestinal and gynaecological operations were being the most frequent in persistent somatization.[16]

Psychological origin behind the physical symptoms is difficult to understand. Most of the patients in our study were not able to accept it and symptoms were badly affected their routine lifestyles, social lives, activities etc. Rief et al. (1995) found that 40% were not able to work because of illness.[17] Patients attributed their problems to physical illness (50%), believed that specific organs were affected (65%), considered their problems as serious (69%) and feared disability or death (66%). A significant proportion also claimed that their problems affected their work (69%), family (41%) and social lives (40%).[18]

Patient with medically unexplained symptoms has history of being symptomatic since long. In this study around 82% of the patients have illness more than 2 years. Somatization disorders tend to be chronic. Epidemiological studies have shown that type and number of physical symptoms often change during follow up periods.[19] In this study only 36% of the patients were examined by psychiatrist Fink (1995)[20] reported 80% patients had been examined by psychiatrist. This is may be due to weak consultation-liasion between physician and psychiatrist. Ring et al. (2005) reported verbal empathy was uncommon among general physicians.[21] we found that verbal empathy during communications was very good from psychiatrist than other physician. So special training required for primary care physician to treat this patients empathetically. It was also found that most of the physician had advised pt for so many investigations, some of them are repetitively done but no any underlying cause was found, doctors explanations about illness were not able to satisfied the pts, so pts were frequently changed the doctor to receive better treatment. Ring et al. (2005)[21] found similar explanation from general physicians like symptomatic management strategies including investigation, prescription and referral would be proposed more often by GP's, GPs would normalise symptoms more often than they would provide explanations. GPs state that they use three different approaches to explain the symptoms to the patients; normalization of symptoms, telling patients that there is no disease, and using metaphors.[26]

Salmon et al. (1999)[27] reported that most explanations were experienced as rejecting the reality of the symptoms, colluding in which the doctor acquiesced with the patients' own biomedical theories. However, a few explanations were perceived by patients as tangible, exculpating, and involving. These explanations were experienced by patients as satisfying and empowering.

In our study we found that health care utilization was very high by these patients due to consultations. But total expenditure was difficult to calculate because of insufficient records. All of them visited at least one time to general physician for their illness, here some data showed no and type of physician consulted by patients.

One study on health care utilization showed that most of the pts to be functionally disabled, they were willing to undergo multiple hospitalizations and investigations. Their health care charges were extraordinary, averaging $4700 annually.[22]

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 (Chaturvedi et al. 2006).[23,24] Medically unexplained symptoms are common in general medicine and represent most common diagnosis like 66% in gynaecology, 62% in neurology, 58% in gastrology, 53% in cardiology, 45% in rheumatology etc.[25]

Somatization usually presented with other comorbid disorders. So details history is required along with somatic complains for better treatment of the patients. Fink (1995)[20] reported 48% of the persistent somatization met criteria for alcohol dependence, 46.4% for panic disorder, 30.4% for depression. Mumford et al. (1997)[28] 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 are depression (70%). Russo J et al. (1994)[29] found that the number of life time somatic symptoms was significantly and positively related to the increase number of current and past episodes of depression and anxiety.

Limitation of the study

1) The inferences were drawn from this study are limited by its cross sectional design.

2) It was limited to small population, finding of the study needs to be interpreted with caution in view of its sample size.

3) Patients of somatization disorder had some con current organic disease which might had led to bias to some extent.

CONCLUSION

Somatization was common among female, younger age and lower socio-economical 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 were present in last 2 years, most of the patients were in state of being symptomatic, that suggest chronic course of somatization disorder. Patients presented with somatization have co morbid conditions like major

depressive disorder, anxiety disorder, alcohol use disorder.

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. Most of the patients had visited to multiple consultants and underwent many costly diagnostic procedures for their symptoms. Most of the patients after multiple investigations and consultations were not ready to accept psychological origin of their physical illness and continued to see next practitioner as they remained dissatisfied and distressed. So patient suffering from somatization disorder has very high rate of health care utilization and they perceived themselves as severely ill and were willing to undergo multiple hospitalizations, diagnostic studies, and operations. Managing somatization is a difficult task for physicians. Patients with this disorders is usually remain dissatisfied and do not understand why and how of his illness. Proper training of primary care physician thus needed and consultation-liaison work between physician and psychiatrist should be strengthened.

ACKNOWLEDGMENTS

Paucity of words indeed makes it difficult for me to express my gratitude to my respected teachers Dr. G. K. Vankar, Dr. Mehul Brahmbhatt, Dr. Minakshi Parikh, Dr. Bhavesh Lakdawala, Dr. Hemang Shah. I am sincerely grateful to all the patients who kindly consented to be a part of this study and shared their personal experiences and made this work possible.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Rief W, Hessel A, Braehler E. Somatization symptoms and hypochondriacal features in the general population. Psychosom Med. 2001;63:595-602
2. Kroenke K, Mangelsdorff D. Common symptoms in ambulatory care: incidence, evaluation, therapy and outcome. Am J Med. 1989;8:262-6
3. Kisely S, Goldberg D, Simon G. A comparison between somatic symptoms with and without clear organic cause: results of an international study. Psychol Med. 1997 Sept;27(5):1011-9.
4. Kroenke K. Patients presenting with somatic complaints: epidemiology, psychiatric comorbidity and management. Int J Methods Psychiatr Res. 2003;12(1):34-43.
5. Kroenke K, Rosmalen G. Symptoms, syndromes, and the value of psychiatric diagnostics in patients who have functional somatic disorders. Med Clin North Am. 2006 Jul;90(4):603-26.
6. Gregory E. Simon, Michael VonKorff, Marco Piccinelli, Claudio Fullerton, Johan Ormel. An international study of the relation between somatic symptoms and depression N Engl J Med. 1999;341:1329-35.
7. Avasthi A. Indianizing psychiatry: is there a case enough? Indian J Psychiatr. 2011;53:111-20.
8. Grover S, Avasthi A, Kalita K, Dalal PK, Rao GP, Chadda RK, et al. IPS multicentric study: functional somatic symptoms in depression. Indian J Psychiatr. 2013;55:31-40.
9. Kroenke K, Price RK. Symptoms in community: prevalence, classification and psychiatry comorbidity. Arch Intern Med. 1993;153:2474-80.
10. Mumford DB, Devereux TA, Maddy PJ, Johnston JV. Factor leading to the reporting of "functional" somatic symptoms by general practice attenders. Br J Gen Pract. 1991;41:454-8.
11. Vishal G, Brahmbhatt M, Vankar G. Somatic symptoms disorder: study of medically unexplained symptoms. Sch J App Med Sci. 2014;2(2B):664-70.
12. Gautam SKS, Kapur RL. Psychiatric patients with somatic symptoms. Indian J Psychiatr. 1977;19:75-80.
13. Carstairs GM, R. L. Kapoor. Stress, change and mental disorder in an Indian village. In: Carstairs GM, R. L. Kapoor, eds. The Great Universe of Kota. London: Hogarth Press; 1976: 48.
14. Kirmayer Laurence J, Young Allan. Culture and somatization: clinical, epidemiological, and ethnographic perspectives. Psychosom Med. 1998;60:420-30.
15. Mumford DB, Bavington JT, Bhatnagar KS, Hussain Y, Mirza S, Naraghi. The Bradford somatic inventory. Br J Psychiatr. 1991;158:379-86.
16. Fink P. Surgery and medical treatment in persistent somatizing patients. J Psychosom Res. 1992;36(5):439-47.
17. Rief W, Hiller W, Geissner E, Fichter M. A two year follow up study with the patients of somatoform disorder. Psychosom. 1995;36:376-86.
18. Nambi SK, Prasad J, Singh D, Abraham V, Kuruvilla A, Jacob KS. Explanatory models and common mental disorders among patients with unexplained somatic symptoms attending a primary care facility in Tamil Nadu. Natl Med J India. 2002;15:331-5.
19. Escobar JI. Somatoform disorder. In: Sadock BJ, Sadock VA, Ruiz P, eds. Kaplan and Sadock's, Coprehensive Textbook of Psychiatry. 9th ed. Philadelphia: Lippincott Williams & Wilkins; 2009: 1928-1948.
20. Fink P. Psychiatric illness in patients with persistent somatisation. Br J Psychiatr. 1995;166:93-9.
21. Ring A, Dowrick CF, Humphris GM, Davies J, Salmon P. The somatising effect of clinical consultation: what patients and doctors say and do

not say when patients present medically unexplained physical symptoms. Soc Sci Med. 2005;61:1505-15.
22. Smith GR, Monson RA, Ray DC. Patients with multiple unexplained symptoms their characteristics, functional health, and health care utilization. Arch Intern Med. 1986;146:69-72.
23. Chaturvedi SK, Desai G, Shaligram D. Somatoform disorders, somatization and abnormal illness behaviour. Int Rev Psychiatr. 2006;18:75-80.
24. Chaturvedi SK, Desai G. What's 'in the body' is actually 'in the mind'! Int Rev Psychiatr. 2006;18:1-3.
25. Nimnuan C, Hotopf M, Wessely S. Medically unexplained symptoms: an epidemiological study in seven specialities. J Psychosom. Res. 2001;51:361-7.
26. Hartman T, Hassink-Franke L, Lucassen P, van Spaendonck KP, van Weel C. Explanation and relations. How do general practitioners deal with patients with persistent medically unexplained symptoms: a focus group study. BMC Family Pract. 2009;10:68.
27. Salmon P, Peters S, Stanley I. Patients' perceptions of medical explanations for somatisation disorders: qualitative analysis. Br Med J. 1999 Feb;318(7180):372-6.
28. David B. Mumford, Khalid Saeed, Imtiaz Ahmad, Shazia Latlf, Mallk H. Mubbashar. Stress and psychiatric disorder in rural Punjab: a community survey. Br J Psychiatr. 1997;110:413-8.
29. Russo J, Katon W, Sullivan M, Clark M, Buchwald D. Severity of somatisation and its relationship to psychiatry disorder and personality. Psychosom. 1994;35:546-56.
30. Winfried Rief, Hiller W. A new approach to the assessment of the treatment effects of somatoform disorders. Psychosom. 2003;44:492-8.
31. Waldemar G, Wedrdelin L, Boysen G. Neurological symptoms and hysterectomy. A retrospective survey of the prevalence of hysterectomy in neurological patients. Am Coll Obstet Gynecol. 1987;70(4):564-8.

DOI: 10.5455/2320-6012.ijrms20140845
Cite this article as: Garala V, Brahmbhatt M, Shah H, Vankar G. Somatization and health seeking behavior. Int J Res Med Sci 2014;2:956-62.