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SOMATIC SYMPTOM DISORDER IN PATIENTS ATTENDING A GENERAL MEDICINE OUTPATIENT DEPARTMENT: A CROSS-SECTIONAL STUDY

KEY WORDS: Anxiety; Depression; General medicine outpatient department; PHQ-15; Somatic symptom disorder.

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ABSTRACT

Background: Somatic symptom disorder (SSD) is a common but frequently overlooked condition in general medical outpatient settings. Patients with SSD often undergo repeated investigations and experience persistent distress due to unrecognized psychological contributors to their physical symptoms. Psychiatric comorbidities, particularly depression and anxiety, play a critical role in symptom amplification and healthcare-seeking behavior. **Aim And Objectives:** The aim of the study is to calculate the prevalence of somatic symptom disorder among patients attending a general medicine outpatient department and find its association with depression and anxiety symptoms. **Material And Methods:** A cross-sectional study was conducted among 250 adult outpatients at a tertiary care hospital. Somatic symptoms were assessed using the Patient Health Questionnaire-15 (PHQ-15), while depressive and anxiety symptoms were evaluated using PHQ-9 and the Generalized Anxiety Disorder-7 (GAD-7), respectively. Associations were examined using chi-square and independent t-tests, and predictors of SSD were identified using binary logistic regression. **Results:** Somatic symptom disorder was identified in 30.4% of participants. Depression and anxiety were observed in 45.6% and 18.4% of patients, respectively. Significant somatization (PHQ-15 ≥10) was strongly associated with SSD ($\chi^2 = 102.95, p < 0.001$). Multivariable analysis showed that depression independently predicted SSD (OR = 1.77, 95% CI: 1.02–3.07, p = 0.041). **Conclusion:** SSD is highly prevalent in general medical outpatient settings and shows a strong association with depressive symptoms. Routine mental health screening in medical clinics may improve early identification and patient outcomes.

INTRODUCTION

General medical outpatient departments frequently encounter patients who present with multiple physical complaints that cannot be fully explained by identifiable medical pathology. These patients often undergo repeated investigations and specialist referrals, yet continue to experience significant distress and functional impairment, contributing to increased healthcare utilization and dissatisfaction for both patients and clinicians [1]. In the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), such presentations are classified as somatic symptom disorder (SSD), a condition characterized by distressing somatic symptoms accompanied by excessive health-related thoughts, emotions, or behaviors [1]. This conceptual shift emphasizes the psychological response to symptoms rather than the absence of a medical explanation, reflecting evolving understanding of mind–body interactions. Epidemiological studies have reported that somatic symptom presentations are common in primary care and general hospital settings, with prevalence rates ranging from 16% to over 30% [5, 6]. Patients with SSD frequently experience functional impairment, persistent symptoms, and repeated healthcare visits despite extensive medical evaluation [7]. These patterns are especially pronounced in tertiary care settings, where patients often present after multiple consultations. Psychiatric comorbidities, particularly depression and anxiety, are strongly associated with somatic symptom disorder and play a critical role in symptom severity and chronicity [6, 9]. Depression has been shown to amplify bodily distress and impair coping mechanisms, while anxiety contributes to heightened vigilance toward physical sensations [7, 10]. Brief screening tools such as the Patient Health Questionnaire-15 (PHQ-15), PHQ-9, and Generalized Anxiety Disorder-7 (GAD-7) have been validated for use in general medical settings and provide a practical approach for early identification of somatic and affective distress [2–4]. Despite its high prevalence, SSD remains under recognized in non-psychiatric settings, particularly in low- and middle-income countries where mental health screening is not routinely integrated into medical care. The present study was therefore undertaken to estimate the prevalence of somatic symptom disorder in a general medicine outpatient department and to examine its association with depressive and anxiety symptoms.

MATERIAL AND METHODS

Study Design: This cross-sectional study was conducted Government Medical College Jammu, reviewed and approved by the **Institutional Ethics Committee of Government Medical College, Jammu** (Approval No. **IEC/GMCJ/2024/1859**).

Study Population: A total of 250 adult patients aged 18–64 years attending the outpatient department were included with mean age of 41 ± 9.54. Patients requiring emergency care or unable to complete questionnaires were excluded. Somatic symptom severity was assessed using the Patient Health Questionnaire-15 (PHQ-15), a validated instrument designed to measure the severity of common somatic symptoms in clinical settings [2]. Depressive symptoms were evaluated using the PHQ-9 [3], and anxiety symptoms were assessed using the GAD-7 [4]. These instruments have been widely used in general medical populations and demonstrate good psychometric properties for screening purposes.

Statistical analysis: **Statistical Analysis**: Statistical analysis was performed using **IBM SPSS Statistics version 21.0**. Continuous variables are presented as **mean ± standard deviation**, and categorical variables are expressed as **frequency and percentage**. Group comparisons were performed using the **independent samples t-test** for continuous variables and the **chi-square test** for categorical variables. Associations between obstructive sleep apnea severity and metabolic abnormalities were evaluated using chi-square analysis. A **p-value < 0.05** was considered statistically significant.

RESULTS:

A total of 250 participants were included in the study, with an almost equal gender distribution (50.4% males and 49.6%

females) as shown in table 1. Somatic symptom disorder was present in 76 participants (30.4%), while 174 (69.6%) did not meet criteria for SSD. Depression was identified in 114 participants (45.6%), and anxiety was present in 46 (18.4%) participants.

Table 1: Socio-demographic And Clinical Characteristics

Variable	Category	N (%)
Gender	Male	126 (50.4)
	Female	124 (49.6)
Somatic Symptom Disorder	Present	76 (30.4)
	Absent	174 (69.6)
Depression	Present	114 (45.6)
	Absent	136 (54.4)
Anxiety	Present	46 (18.4)
	Absent	204 (81.6)

Table 2: Association Between SSD And Clinical Variables

Variable	χ^2	p-value
Gender	0.25	0.620
Depression	3.57	0.058
Anxiety	0.29	0.591
Significant Somatization	102.95	<0.001

Table 2. show that significant somatization was strongly associated with the presence of SSD ($\chi^2 = 102.95$, $p < 0.001$). No statistical significant association was observed between SSD and gender ($\chi^2 = 0.25$, $p = 0.620$) or anxiety ($\chi^2 = 0.29$, $p = 0.591$). Depression showed a borderline association with SSD ($\chi^2 = 3.57$, $p = 0.058$).

Table 3: Predictors Of Somatic Symptom Disorder

Predictor	OR	95% CI	p-value
Female gender	1.25	0.72–2.17	0.419
Depression	1.77	1.02–3.07	0.041
Anxiety	1.22	0.61–2.42	0.570

Binary logistic regression analysis identified depression as a significant independent predictor of SSD (OR = 1.77, 95% CI: 1.02–3.07; p = 0.041). Female gender (OR = 1.25, p = 0.419) and anxiety (OR = 1.22, p = 0.570) were not significant predictors after adjustment as shown in Table 3.

Table 4: Gender-wise Comparison Of Symptom Severity

Mean Score	Male Mean ± SD	Female Mean ± SD	p-value
PHQ-15	9.36 ± 4.06	9.67 ± 4.14	0.380
PHQ-9	8.01 ± 5.08	9.08 ± 5.01	0.057
GAD-7	5.44 ± 3.98	5.62 ± 4.06	0.694

Table 4 shows there is no statistically significant differences across somatic, depressive, or anxiety symptoms as compared to mean symptom scores of male and females. Mean PHQ-15 scores were comparable between males and females (9.36 ± 4.06 versus 9.67 ± 4.14; p = 0.380). Similarly, PHQ-9 and GAD-7 scores did not differ significantly between genders.

DISCUSSION

The present study shows a high prevalence of somatic symptom disorder (SSD) among patients attending a general medicine outpatient department, with nearly one-third of participants meeting criteria for the disorder. This finding highlights the substantial psychiatric burden present in routine medical practice and reinforces the clinical importance of identifying somatic symptom disorder in non-psychiatric settings. Our prevalence estimate (30.4%) is comparable to findings from several Asian and Indian studies conducted in primary care and general hospital settings. Previous research from India has consistently reported somatization prevalence rates ranging from 20% to 35% among medical outpatients, reflecting the high burden of unexplained or disproportionate somatic symptoms in clinical populations [5, 6, 8]. Similar patterns have been observed across Asian healthcare systems, where somatic symptom expression is a common mode of psychological distress presentation, particularly in settings where mental health stigma and limited psychiatric access persist [9, 10].

The consistency of our findings with these studies supports the external validity of our results and underscores the relevance of SSD as a common clinical problem in Asian medical settings. The strong association between significant somatization and SSD observed in our study underscores the clinical utility of the Patient Health Questionnaire-15 (PHQ-15) as a screening tool in general medical practice. Prior studies have demonstrated that higher PHQ-15 scores are associated with greater functional impairment, increased healthcare utilization, and higher rates of psychiatric comorbidity [2, 7].

Our findings further support the use of PHQ-15 as a practical and reliable instrument for identifying patients at risk for SSD in busy outpatient clinics. Depression emerged as an independent predictor of SSD in multivariable analysis, even after controlling for anxiety and gender. This observation aligns with earlier studies showing a strong bidirectional relationship between depressive symptoms and somatic distress [6, 9]. Depression may amplify bodily symptom perception through mechanisms such as negative cognitive appraisal, reduced coping capacity, and impaired emotional regulation, thereby increasing vulnerability to persistent somatic symptoms [7, 10].

Although anxiety symptoms were frequently observed among patients with SSD, anxiety did not independently predict SSD after adjustment for confounders. Similar findings have been reported in earlier work, suggesting that anxiety may act as a contributing or maintaining factor rather than a primary driver of somatic symptom disorder in general medical populations [9, 10]. Contrary to earlier literature reporting higher somatization rates among women, the present study did not demonstrate significant gender differences in SSD prevalence or symptom severity [8]. This may reflect evolving socio-cultural patterns of symptom reporting, improved health awareness among male patients, or changing help-seeking behaviors in contemporary clinical settings.

From a clinical perspective, these findings emphasize the need for routine screening of somatic and affective symptoms in general medical outpatient departments. Integrating brief psychiatric screening instruments into routine medical care may facilitate early identification of SSD, reduce unnecessary investigations, and promote timely referral for psychiatric intervention, ultimately improving patient outcomes and reducing healthcare costs.

CONCLUSION

Somatic symptom disorder is highly prevalent among patients attending general medicine outpatient services, with nearly one-third of patients affected. **Depression emerged as the strongest independent predictor of SSD**, highlighting the need for integrated mental health screening in medical settings. Routine use of brief screening tools may facilitate early identification, reduce unnecessary investigations, and improve patient outcomes. These findings support the integration of consultation–liaison psychiatry services into general medical practice to ensure holistic and efficient patient care.

Limitations

This study has several limitations that should be acknowledged. The **cross-sectional design** precludes causal inferences regarding the relationship between depression, anxiety, and somatic symptom disorder. As the study was conducted in a **single tertiary-care center**, the findings may not be fully generalizable to other clinical settings or community populations. The use of **self-report**

screening instruments may have introduced reporting bias, and the assessment of psychiatric diagnoses was limited to current symptomatology. Additionally, potential confounding factors such as medical comorbidities, duration of symptoms, and psychosocial stressors were not systematically evaluated. Future longitudinal and multicenter studies are needed to confirm these findings and clarify the temporal relationships between somatic symptoms and psychiatric morbidity.

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