

FREQUENCY AND RISK FACTORS OF SOMATIC SYMPTOMS IN PATIENTS OF DEPRESSION: A CROSS-SECTIONAL STUDY AT PIMS ISLAMABAD

Original Research

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ABSTRACT

Background: Depressive disorder is a major global health concern and is frequently associated with somatic symptoms that complicate diagnosis and delay treatment. Despite its clinical importance, limited research in Pakistan has explored the socio-demographic correlates of somatic symptoms among patients with depression. Identifying these associations is essential for early recognition and timely intervention, which can reduce morbidity, improve quality of life, and alleviate healthcare costs in resource-limited settings.

Objective: To determine the frequency and socio-demographic correlates of somatic symptoms in adults suffering from depression.

Methods: A cross-sectional study was conducted at the Department of Psychiatry, Pakistan Institute of Medical Sciences (PIMS), Islamabad, from January to March 2025. A total of 243 patients aged 18–60 years diagnosed with depression based on DSM-5 criteria were enrolled through consecutive sampling. Somatic symptoms were assessed using the PHQ-15 questionnaire. Data were analyzed using SPSS version 26. Quantitative variables were presented as mean \pm standard deviation, and qualitative data as frequencies and percentages. Associations between PHQ-15 scores and demographic parameters were analyzed using the chi-square test, with $p \leq 0.05$ considered statistically significant.

Results: Of the 243 participants, 74 (30.5%) were male and 169 (69.5%) female. The majority (53.9%) were aged 12–25 years, followed by 26–35 years (25.9%). The most frequently reported somatic symptoms were low energy (59.3%) and trouble sleeping (48.1%), while painful sexual intercourse was least reported (3.7%). Based on PHQ-15 scoring, 44.0% had high somatization, 30.0% moderate, 18.5% mild, and 7.4% minimal. Age was significantly associated with somatization severity ($p = 0.011$), with higher symptom burden observed among older participants.

Conclusion: Somatic symptoms were highly prevalent among patients with depression, with fatigue and insomnia being the most troublesome. Advancing age was significantly correlated with greater somatic symptom severity, emphasizing the importance of age-sensitive screening and management in depressive disorders.

Keywords: Affective Disorders, Depression, DSM-5, PHQ-15 Questionnaire, Psychiatric Assessment, Somatization, Somatic Symptoms.

INTRODUCTION

Depressive disorder, one of the most prevalent mental health conditions globally, remains a major public health concern. According to the World Health Organization (WHO), approximately 3.8% of the world's population experiences depression, including 5% of adults—4% of men and 6% of women (1). The disorder is clinically characterized by persistent low mood, diminished interest or pleasure in usual activities, and reduced energy or stamina lasting for at least two weeks. Despite extensive research, depression remains underdiagnosed and undertreated, particularly when it manifests through somatic rather than psychological symptoms. Somatic symptoms, defined as physical complaints that cannot be adequately explained by known pathophysiological mechanisms, are a hallmark feature in a significant subset of depressive disorders. A multicenter WHO study revealed that approximately 69% of individuals with depression report somatic symptoms, with 45% to 95% presenting exclusively with physical complaints (2-4). This broad range underscores the clinical complexity of depression and highlights the difficulty faced by primary care physicians in identifying psychiatric illness among patients presenting with physical discomfort. The expression of somatic symptoms varies considerably across cultures and social contexts. Cultural norms often dictate the ways emotional distress is communicated, with individuals in certain societies, including South Asian populations, tending to somatize psychological suffering. A study in England identified significant predictors for higher somatic symptom scores, including lower educational attainment, separated or widowed marital status, exposure to psychological abuse in childhood, comorbid medical conditions, and concurrent anxiety or depression (5,6). Similarly, local data suggest that cultural and socioeconomic determinants strongly influence symptom presentation. A recent study conducted in 2023 in Khyber Pakhtunkhwa found headache (61.9%) and lethargy (41.1%) to be the most frequently reported somatic complaints among psychiatric patients (7), while an earlier 2009 study in Karachi observed that individuals with medically unexplained symptoms were typically more educated, financially stable, and socially supported (8).

The predominance of somatic presentations creates significant diagnostic challenges in primary healthcare settings. Patients with depression frequently undergo extensive medical evaluations before being referred for psychiatric assessment, delaying appropriate treatment initiation. Consequently, these diagnostic delays contribute to the under recognition of depression in primary care (9). Furthermore, this diagnostic ambiguity leads to excessive medical investigations, escalating both the patient's financial burden and the overall economic strain on the healthcare system. In low- and middle-income countries such as Pakistan, where healthcare resources are limited, the preference of physicians to explore physical rather than psychiatric causes of somatic symptoms—as reported in a 2011 Karachi study—exacerbates the problem (10,11). Despite the growing recognition of this issue, no comprehensive research in Pakistan has yet examined the socio-demographic correlates of somatic symptoms specifically within depressive disorders. Understanding these associations is crucial for the early detection of depression in primary care and for reducing the treatment gap through timely psychiatric referral. Therefore, the present study aims to estimate the frequency of somatic symptoms among patients diagnosed with depression and to identify the socio-demographic variables significantly associated with somatic presentations. This understanding will enhance clinical recognition, facilitate earlier intervention, and ultimately reduce both the personal and systemic burden of depression in resource-limited healthcare environments.

METHODS

This cross-sectional study was conducted in the Department of Psychiatry, Pakistan Institute of Medical Sciences (PIMS) Hospital, Islamabad, from January 2025 to March 2025. A total of 243 male and female patients aged between 18 and 60 years, clinically diagnosed with depression, were enrolled. The sample size was calculated using the WHO sample size calculator, assuming a 95% confidence level, a population proportion of 69%, and an absolute precision of 6% (2). A non-probability consecutive sampling technique was employed to recruit participants from the outpatient department of psychiatry. Patients were included if they met the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) criteria for major depressive disorder, which required the presence of at least five symptoms during a two-week period, with one being either depressed mood or loss of interest/pleasure. Other qualifying symptoms included significant changes in appetite or weight, psychomotor retardation or agitation observable by others, fatigue, feelings of worthlessness or inappropriate guilt, diminished concentration, indecisiveness, and recurrent thoughts of death or suicidal ideation. Exclusion criteria were applied to maintain diagnostic clarity and eliminate confounding factors. Patients were excluded if they had a

prior history of other psychiatric disorders such as schizophrenia or bipolar affective disorder, or comorbid medical conditions including thyroid disorders, chronic renal failure, chronic liver disease, cerebrovascular accidents, ischemic heart disease, intracranial space-occupying lesions, or history of traumatic brain injury. Additionally, patients with diabetes mellitus (fasting plasma glucose >126 mg/dl), hypertension (blood pressure >140/90 mmHg on two or more occasions at least 24 hours apart), or anemia (hemoglobin <12 g/dl in females and <13 g/dl in males) were excluded to prevent misattribution of physical complaints to somatic symptoms of depression. Following approval from the Research Review Board of PIMS and the College of Physicians and Surgeons Pakistan (CPSP), all participants were enrolled after providing informed written consent. The study adhered to the principles of the Declaration of Helsinki regarding ethical conduct in research involving human participants. The objectives, benefits, and potential risks of participation were clearly explained to all individuals before consent was obtained.

Data were collected through structured face-to-face interviews. Baseline sociodemographic and clinical variables were recorded, including age (in years), gender, weight (in kilograms, measured using a calibrated weighing scale), height (in centimeters, using a stadiometer), and body mass index (BMI), calculated as weight in kilograms divided by height in meters squared. Additional details such as duration of illness (in months), severity of depression, educational attainment, profession, marital status, socioeconomic status, residence (urban or rural), and treatment status for depression were also documented. The assessment of somatic symptoms was performed using the Patient Health Questionnaire-15 (PHQ-15), a validated tool widely used to evaluate somatic symptom severity (12,13). The instrument included items such as stomach pain, back pain, pain in arms or legs, menstrual cramps, headache, chest pain, dizziness, fainting spells, racing heart, shortness of breath, pain during sexual intercourse, nausea, irritable bowel symptoms, fatigue, and sleep disturbance. The PHQ-15 score was calculated and interpreted as follows: 0–4 indicated minimal symptoms, 5–9 mild symptoms, 10–14 moderate symptoms, and 15–30 severe somatic symptoms (14,15). To further ensure the reliability of symptom assessment, the Level 2—Somatic Symptom—Adult Patient Form, developed by the American Psychiatric Association, was also utilized for comprehensive symptom evaluation. Data analysis was performed using Statistical Package for the Social Sciences (SPSS) version 26. Quantitative variables such as age, BMI, and PHQ-15 scores were summarized as mean \pm standard deviation, while qualitative variables such as gender, education, marital status, residence, profession, socioeconomic status, and treatment status were expressed as frequencies and percentages. Stratification was applied for age, gender, BMI, education, residence, marital status, profession, socioeconomic status, and treatment status of depression to control for potential confounding factors. Post-stratification, the chi-square test was used to determine statistical significance, with a p -value ≤ 0.05 considered significant.

RESULTS

The study comprised 243 patients diagnosed with depression, among whom 74 (30.5%) were male and 169 (69.5%) were female, indicating a predominance of female participants. The majority of participants ($n = 131$, 53.9%) were between 12 and 25 years of age, followed by 26–35 years ($n = 63$, 25.9%), 36–45 years ($n = 25$, 10.3%), and 46–60 years ($n = 24$, 9.9%). Most participants were unemployed ($n = 150$, 61.7%), while 17 (7.0%) reported a monthly income greater than 100,000 PKR, 25 (10.3%) earned between 51,000–100,000 PKR, 28 (11.5%) between 31,000–50,000 PKR, and 23 (9.5%) less than 30,000 PKR. Regarding marital status, 140 (57.6%) were single, 95 (39.1%) were married, 5 (2.1%) were divorced, and 3 (1.2%) were widowed. Educational levels showed that 40 (16.5%) were uneducated, 61 (25.1%) had secondary education, 75 (30.9%) were graduates, and 67 (27.6%) had higher education. The majority of participants ($n = 132$, 54.3%) had a normal body mass index (BMI), followed by 61 (25.1%) who were overweight, 25 (10.3%) who were underweight, and 25 (10.3%) who were obese. In terms of residence, 164 (67.5%) participants lived in urban areas and 79 (32.5%) in rural settings, with 185 (76.1%) living in self-owned homes and 58 (23.9%) in rented ones. Disease duration varied, with 96 (39.5%) reporting symptoms for more than 24 months, 85 (35.0%) for 1–6 months, 40 (16.5%) for 13–24 months, and 22 (9.1%) for 6–12 months. Somatic symptoms were widely prevalent among participants. Low energy was the most frequently reported symptom, affecting 144 (59.3%) patients, followed by trouble sleeping in 117 (48.1%), and pain in the arms, legs, and joints in 95 (39.1%). Headache was reported by 91 (37.4%) participants, back pain by 82 (33.7%), and racing heart by 95 (39.1%). In contrast, painful sexual intercourse was the least reported symptom, noted by only 9 (3.7%) patients. Other common somatic complaints included stomach pain in 63 (25.9%), dizziness in 68 (28.0%), nausea or indigestion in 74 (30.5%), and chest pain in 41 (16.9%). Assessment of somatic symptom severity using the PHQ-15 scale revealed that 107 (44.0%) patients exhibited high symptom severity, 73 (30.0%) had medium severity, 45 (18.5%) had low severity, and 18 (7.4%) had minimal somatic symptoms. Subgroup analysis demonstrated a statistically significant association between age and somatic symptom severity ($p = 0.011$). Among patients aged 46–60 years, 70.8% exhibited high PHQ-15 scores compared to 39.7% in the 12–25 age group, indicating an increasing trend in somatization with advancing age. No

statistically significant association was found between PHQ-15 severity and gender ($p = 0.057$), marital status ($p = 0.100$), BMI ($p = 0.223$), education level ($p = 0.265$), residence ownership ($p = 0.852$), or urban–rural residence ($p = 0.567$).

The findings suggest that somatic symptoms were common across all demographic categories, with fatigue and sleep disturbance being predominant. The significant correlation between advancing age and higher somatization severity emphasizes the need for increased screening among older adults. Analysis of socio-demographic variables revealed that the severity of somatic symptoms, as measured by PHQ-15 scores, demonstrated variable associations across different social categories. Among educational groups, high somatization was most frequent among uneducated participants (52.5%) and graduates (46.7%), while those with higher education exhibited comparatively lower rates (35.8%), although this difference did not reach statistical significance ($p = 0.265$). Socioeconomic status, inferred from income categories, indicated that unemployed individuals (61.7% of the sample) were more likely to experience moderate-to-high symptom burden, suggesting a link between financial insecurity and somatization; however, formal significance testing was not performed for income due to categorical limitations. Marital status analysis showed that 52.6% of married participants reported high somatic symptom severity compared with 37.1% among widowed and 66.7% among single participants, again without a statistically significant association ($p = 0.100$). Gender-based comparison showed a higher frequency of severe somatic symptoms in females (49.7%) than in males (31.1%), approaching but not achieving statistical significance ($p = 0.057$). Collectively, these findings suggest that while older age exhibited a significant relationship with increased somatization, other socio-demographic parameters—including gender, marital status, education, residence, and socioeconomic background—showed nonsignificant but clinically meaningful trends toward higher somatization among socially and economically vulnerable subgroups.

Table 1: Demographic Distribution

	Category	Frequency
Gender	Male	74(30.5%)
	Female	169(69.5%)
Age (years)	12-25	131(53.9%)
	26-35	63(25.9%)
	36-45	25(10.3%)
	46-60	24(9.9%)
Monthly Income (Rupees0	>100K	17(7%)
	51K-100K	25(10.3%)
	31K-50K	28(11.5%)
	Under 30K	23(9.5%)
	Unemployed	150(61.7%)
Marital Status	Married	95(39.1%)
	Single	140(57.6%)
	Widowed	3(1.2%)
	Divorced	5(2.1%)
BMI (kg/m2)	Underweight (<18.5kg/m2)	25(10.3%)
	Normal weight (18.5 to 24.9kg/m2)	132(54.3%)
	Overweight (25.0 to 29.9kg/m2)	61(25.1%)

	Category	Frequency
Residence Ownership	Obese (30.0 and above kg/m2)	25(10.3%)
	Self-owned	185(76.1%)
	Rented	58(23.9%)
Residential Area	Rural	79(32.5%)
	Urban	164(67.5%)
Disease Duration (months)	1-6 months	85(35%)
	6-12 months	22(9.1%)
	13 to 24 months	40(16.5%)
	More than 24 months	96(39.5%)
Education	Uneducated	40(16.5%)
	Secondary education	61(25.1%)
	Graduate level education	75(30.9%)
	Higher education	67(27.6%)

Table 2: Somatic Symptoms Among Study Participants (N = 243)

Somatic Symptoms	Symptom's severity		
	Not bothered at all	Bothered a little	Bothered a lot
Stomach pain	104(42.8%)	76(31.3%)	63(25.9%)
Back pain	68(28.0%)	93(38.3%)	82(33.7%)
Pain in arms, legs and joints	53(21.8%)	95(39.1%)	95(39.1%)
Menstrual cramps (in women)	132(54.3%)	57(23.5%)	54(22.2%)
Headache	42 (17.3%)	110(45.3%)	91(37.4%)
Chest pain	137(56.4%)	65(26.7%)	41(16.9%)
Dizziness	99(40.7%)	76(31.3%)	68(28.0%)
Fainting spells	143(58.8%)	70(28.8%)	30(12.3%)
Racing heart	64(26.3%)	84(34.6%)	95(39.1%)
Shortness of breath	93(38.3%)	86(35.4%)	64(26.3%)
Painful sexual intercourse	202(83.1%)	32(13.2%)	09(3.7%)
Constipation, loose bowels, diarrhea	104(42.8%)	76(31.3%)	63(25.9%)
Nausea, gas, indigestion	95(39.1%)	74(30.5%)	74(30.5%)
Low energy	22(9.1%)	77(31.7%)	144(59.3%)
Trouble sleeping	46(18.9%)	80(32.9%)	117(48.1%)

Table 3: Somatic Symptoms Severity Among Study Participants (N = 243)

PHQ 15 severity score	Frequency	Percent
Minimal (score 0 to 4)	18	7.4
Low (score 5 to 9)	45	18.5
Medium (score 10 to 14)	73	30.0
High (score 15 to 30)	107	44.0
Total	243	100.0

Table 4: Subgroup Analysis of Degree of Somatization with Sociodemographic Parameters (N = 243)

			Severity PHQ-15				Total	P value
			Minimal	Low	Medium	High		
Participant (years)	Age	12-25	13	32	34	52	131	0.011
			9.9%	24.4%	26.0%	39.7%	100.0%	
		26-35	4	8	25	26	63	
			6.3%	12.7%	39.7%	41.3%	100.0%	
		36-45	1	1	11	12	25	
			4.0%	4.0%	44.0%	48.0%	100.0%	
		46-60	0	4	3	17	24	
			0.0%	16.7%	12.5%	70.8%	100.0%	
Participant gender	Male		7	18	26	23	74	0.057
			9.5%	24.3%	35.1%	31.1%	100.0%	
	Female		11	27	47	84	169	
			6.5%	16.0%	27.8%	49.7%	100.0%	
Participant marital status	Married		6	9	30	50	95	0.100
			6.3%	9.5%	31.6%	52.6%	100.0%	
	Widowed		12	36	40	52	140	
			8.6%	25.7%	28.6%	37.1%	100.0%	
	Single		0	0	1	2	3	
			0.0%	0.0%	33.3%	66.7%	100.0%	
	Divorced		0	0	2	3	5	
			0.0%	0.0%	40.0%	60.0%	100.0%	
Participant BMI	Underweight		2	2	10	11	25	0.223
			8.0%	8.0%	40.0%	44.0%	100.0%	
	Normal		12	32	32	56	132	
			9.1%	24.2%	24.2%	42.4%	100.0%	
	overweight		2	8	24	27	61	

		Severity PHQ-15				Total	P value
		Minimal	Low	Medium	High		
		3.3%	13.1%	39.3%	44.3%	100.0%	
Residential area	Obese	2	3	7	13	25	0.567
		8.0%	12.0%	28.0%	52.0%	100.0%	
	Rural	6	18	20	35	79	
		7.6%	22.8%	25.3%	44.3%	100.0%	
	Urban	12	27	53	72	164	
		7.3%	16.5%	32.3%	43.9%	100.0%	
	Self-owned	14	34	58	79	185	
		7.6%	18.4%	31.4%	42.7%	100.0%	
Residence ownership	Rented	4	11	15	28	58	0.852
		6.9%	19.0%	25.9%	48.3%	100.0%	
	Uneducated	2	6	11	21	40	
		5.0%	15.0%	27.5%	52.5%	100.0%	
	Secondary	3	8	23	27	61	
		4.9%	13.1%	37.7%	44.3%	100.0%	
	Graduate	6	19	15	35	75	
		8.0%	25.3%	20.0%	46.7%	100.0%	
Participant Education	Higher	7	12	24	24	67	0.265
		10.4%	17.9%	35.8%	35.8%	100.0%	

Table 5: Association of Somatic Symptom Severity (PHQ-15) with Key Socio-Demographic Variables (n = 243)

Variable	Category	Minimal (%)	Low (%)	Medium (%)	High (%)	p-Value
Gender	Male	9.5	24.3	35.1	31.1	0.057
	Female	6.5	16.0	27.8	49.7	
Marital Status	Married	6.3	9.5	31.6	52.6	0.100
	Widowed	8.6	25.7	28.6	37.1	
	Single	0.0	0.0	33.3	66.7	
	Divorced	0.0	0.0	40.0	60.0	
Education	Uneducated	5.0	15.0	27.5	52.5	0.265
	Secondary	4.9	13.1	37.7	44.3	
	Graduate	8.0	25.3	20.0	46.7	
	Higher	10.4	17.9	35.8	35.8	
Residential Area	Rural	7.6	22.8	25.3	44.3	0.567
	Urban	7.3	16.5	32.3	43.9	

Variable	Category	Minimal (%)	Low (%)	Medium (%)	High (%)	p-Value
Residence Ownership	Self-owned	7.6	18.4	31.4	42.7	0.852
	Rented	6.9	19.0	25.9	48.3	

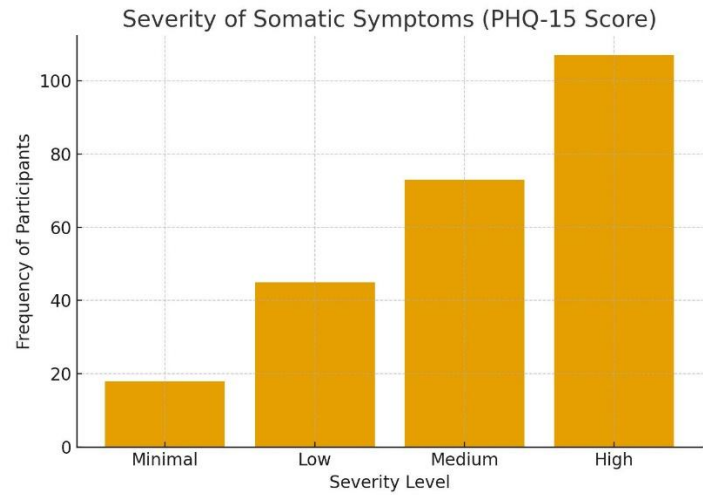


Figure 2 Severity of Somatic Symptoms (PHQ-15 Score)

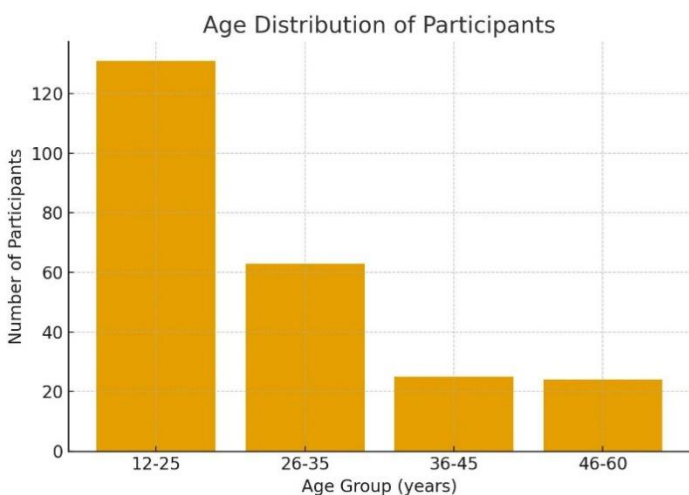


Figure 2 Age Distribution of Participants

DISCUSSION

The present study demonstrated that the vast majority of patients diagnosed with depression according to DSM-5 criteria exhibited somatic symptoms of varying intensity, as reflected in their PHQ-15 scores. Almost all participants reported at least one somatic complaint, with a significant proportion presenting with moderate to high symptom severity. These findings align with earlier research that documented a high frequency of somatic manifestations among patients with depressive disorders, where more than 70% of individuals attending mental health facilities reported similar physical symptoms (8). Conversely, population-based studies, particularly those using telephonic surveys, have shown lower prevalence rates of depressive symptoms in patients with somatic disorders, likely due to the inclusion of individuals with milder psychopathology or subclinical depressive traits (9). This variation highlights the influence of study design, setting, and diagnostic threshold on the observed prevalence of depression among patients with somatic presentations. In this cohort, low energy and disturbed sleep were the most frequently reported somatic symptoms. These findings are consistent with previous meta-analyses that identified insomnia as a core feature of depressive disorders (10). Longitudinal evidence supports this relationship, suggesting that sleep disturbances not only co-occur with depression but also act as an independent risk factor for its onset and recurrence (11). The pathophysiological explanation for this bidirectional association may lie in the dysregulation of monoamine neurotransmitters—particularly serotonin, dopamine, and norepinephrine—which are involved in both mood regulation and the sleep–wake cycle (12). Sleep deprivation further impairs cognitive functions such as attention, memory, and emotional regulation, thereby exacerbating depressive symptomatology (13). The interrelationship between depression and insomnia appears reciprocal, as each condition perpetuates the other, leading to a self-sustaining cycle of psychological and physiological dysfunction (14).

The study revealed that 44.0% of participants exhibited severe levels of somatization, and 30.0% had moderate symptom severity, closely resembling data from European cohorts assessing psychosomatic symptom burden among patients with depressive disorders (15). The observed trends can be explained through the biopsychosocial model of somatization, which proposes that sociocultural beliefs, illness behavior, and healthcare accessibility shape how individuals express psychological distress (16). Within this framework, somatic symptom expression can be seen as a culturally sanctioned means of communicating emotional suffering, particularly in societies where mental illness carries social stigma. Furthermore, the subjective experience of pain is shaped by a combination of biological, psychological, and social factors, with evidence indicating that gender, ethnicity, and genetic predispositions modulate individual pain perception and reporting (17). A notable finding in this study was the significant association between advancing age and higher somatic

symptom severity. Older adults were more likely to report multiple somatic complaints, which may be attributed to age-related changes in health perception, social roles, and functional capacity. Diminished social support, bereavement, and physical frailty can amplify the expression of somatic distress in late life (18). Similar results have been reported in other studies, where participants aged 40 years and above demonstrated the highest somatization scores (19). The coexistence of chronic medical illnesses, cognitive decline, or depressive syndromes such as late-life depression may further complicate the diagnostic process and contribute to the persistence of physical complaints in this age group. No significant gender-based difference was found in the type or intensity of somatic symptoms, suggesting that both men and women experience comparable physical manifestations of depression. However, global data have shown that women are more prone to experiencing and reporting somatic and affective symptoms than men (20,21). These differences are often attributed to hormonal influences, social conditioning, gender roles, and the greater societal acceptance of emotional expressiveness among women (22). In contrast, men may underreport emotional distress due to sociocultural expectations, resulting in potential diagnostic under recognition in male patients.

The strength of the current study lies in its relatively large sample size, systematic assessment using validated instruments such as the PHQ-15, and the inclusion of multiple socio-demographic correlates to evaluate their relationship with somatic symptom burden. The standardized diagnostic criteria ensured diagnostic uniformity and reduced observer bias. However, several limitations warrant consideration. The cross-sectional design precluded causal inference regarding the relationship between depression and somatic symptoms. The exclusion of patients with chronic medical conditions, although methodologically justified to avoid confounding, may have underestimated the true burden of somatic presentations in real-world clinical settings where comorbidities are common. Additionally, data were collected from a single tertiary care center, which may limit generalizability to the broader community. The reliance on self-reported symptomatology may have introduced recall or reporting bias. Future research should employ longitudinal designs to assess temporal relationships between depressive episodes and somatic symptom progression. Inclusion of biochemical markers, assessment of inflammatory mediators, and evaluation of treatment response patterns could enhance understanding of the biological underpinnings of somatization in depression. Expanding future studies to multiple centers and including diverse socio-economic strata would provide more representative data (23). Moreover, integrating psychotherapeutic and psychoeducational interventions into primary care screening frameworks could facilitate early identification and management of depressive disorders with somatic manifestations. In summary, this study underscores the high prevalence of somatic symptoms among patients with depression, particularly fatigue and insomnia, and identifies advancing age as a key demographic correlate. These findings emphasize the necessity for clinicians, especially in primary care settings, to maintain a high index of suspicion for depressive disorders when evaluating patients presenting with unexplained physical complaints, thereby promoting early diagnosis, holistic management, and reduced healthcare burden.

CONCLUSION

The study concluded that somatic symptoms were highly prevalent among individuals suffering from depression, with fatigue and sleep disturbance being the most commonly experienced complaints. A substantial number of patients exhibited a high degree of somatization, indicating that physical symptoms often serve as prominent manifestations of psychological distress. Age emerged as a key factor influencing the intensity of somatic symptoms, with older adults showing a greater tendency toward severe somatization. These findings highlight the importance of incorporating age-sensitive screening and management strategies in clinical practice. Physicians, particularly in primary care settings, should remain vigilant for somatic presentations of depression to ensure timely recognition, holistic treatment, and prevention of chronic psychological and physical health burdens at both individual and community levels.

AUTHOR CONTRIBUTION

Author	Contribution
Fatima Bhatti*	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Rizwan Taj	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published

REFERENCES

1. Caldarola G, Raimondi G, Samela T, Pinto L, Pampaloni F, Starace MVR, et al. Assessing a measure for Quality of Life in patients with severe Alopecia Areata: a multicentric Italian study. *Front Public Health*. 2024;12:1415334.
2. Huang WL, Leventhal B, Lin CC, Chien YL. Health anxiety and somatic symptoms in adults on the autism spectrum. *Psychiatry Res*. 2025;350:116550.
3. Valentine TR, Presley CJ, Carbone DP, Shields PG, Andersen BL. Illness perception profiles and psychological and physical symptoms in newly diagnosed advanced non-small cell lung cancer. *Health Psychol*. 2022;41(6):379-88.
4. Johnson PC, Abramson JS, LaCasce AS, Armand P, Barnes J, Merryman RW, et al. Longitudinal Patient-Reported Outcomes in Older Adults With Aggressive Lymphomas Receiving Chemoimmunotherapy. *J Natl Compr Canc Netw*. 2025;23(3).
5. Johnson PC, Dhawale T, Newcomb RA, Amonoo HL, Lavoie MW, Vaughn D, et al. Longitudinal patient-reported outcomes in patients receiving chimeric antigen receptor T-cell therapy. *Blood Adv*. 2023;7(14):3541-50.
6. Geense WW, Zegers M, Peters MAA, Ewalds E, Simons KS, Vermeulen H, et al. New Physical, Mental, and Cognitive Problems 1 Year after ICU Admission: A Prospective Multicenter Study. *Am J Respir Crit Care Med*. 2021;203(12):1512-21.
7. Chan LML, Choi EPH, Lam WWT, Chan KH, Pang SYY, Kwok JYY. Palliative Care Need and Quality of Life Mediated by Psychological Distress in Neurologic Diseases. *J Pain Symptom Manage*. 2025;69(6):641-53.e3.
8. Vargas-Escobar LM, Reina-Gamba NC, Medellín-Olaya J, Consuegra-Pareja CA. Palliative home care: health-related quality of life. *BMJ Support Palliat Care*. 2023;13(e2):e282-e6.
9. Alasfar S, Chiang TP, Snyder AJ, Ou MT, Boyarsky BJ, Abedon AT, et al. PASC in Solid Organ Transplant Recipients With Self-reported SARS-CoV-2 Infection. *Transplantation*. 2023;107(1):181-91.
10. Shah SN, Yuen KCJ, Bonert V, Huang W, Sisco J, Palaty C, et al. Patient perspectives on acromegaly disease burden: insights from a community meeting. *Front Endocrinol (Lausanne)*. 2025;16:1516131.
11. Xu Z, Zhang D, Xu D, Li X, Xie YJ, Sun W, et al. Physical and mental health outcomes including behavior and attitudes in people having social contacts with COVID-19 patients. *PLoS One*. 2021;16(2):e0245945.
12. Ficheux AS, Brenaut E, Schut C, Dalgard FJ, Bewley A, van Middendorp H, et al. Predictors of perceived stress, perceived stigmatization, and body dysmorphia in patients with chronic prurigo/prurigo nodularis: Results from an observational cross-sectional multicenter European study in 17 countries. *J Am Acad Dermatol*. 2025;92(5):1056-63.
13. Wu H, Yang Y, Shen W. Prevalence and Correlations of Premenstrual Dysphoric Disorder: A Sample of Adult Working Women. *Actas Esp Psiquiatr*. 2024;52(5):678-85.

14. Cole RH, Elmalem MS, Petrochilos P. Prevalence of autistic traits in functional neurological disorder and relationship to alexithymia and psychiatric comorbidity. *J Neurol Sci.* 2023;446:120585.
15. Maurer E, Walter N, Baumgartner H, Histing T, Alt V, Rupp M. Quality of life after fracture-related infection of the foot. *Foot Ankle Surg.* 2022;28(8):1421-6.
16. Ventura L, Cano-Vindel A, Muñoz-Navarro R, Barrio-Martínez S, Medrano LA, Moriana JA, et al. The role of cognitive factors in differentiating individuals with somatoform disorders with and without depression. *J Psychosom Res.* 2021;148:110573.
17. Mulak A, Freud T, Waluga M, Bangdiwala SI, Palsson OS, Sperber AD. Sex- and gender-related differences in the prevalence and burden of disorders of gut-brain interaction in Poland. *Neurogastroenterol Motil.* 2023;35(6):e14568.
18. Yap AU, Sultana R, Natu VP. Somatic and temporomandibular disorder symptoms - Idioms of psychological distress in Southeast Asian youths. *Cranio.* 2024;42(4):364-71.
19. Wazir MNK, Kakakhel S, Gul AN, Awan Q, Khattak AF, Yousaf N, et al. Psychiatric Illnesses, Somatic Complaints, and Treatments in a Tertiary Care Hospital in Khyber Pakhtunkhwa, Pakistan: A Cross-Sectional Study. *Cureus.* 2023 Aug;15(8):e43151.
20. Li X, Zhang H, Han X, Guo L, Ceban F, Liao Y, et al. Predictive potential of somatic symptoms for the identification of subthreshold depression and major depressive disorder in primary care settings. *Front Psychiatry.* 2023 Feb 14;14:999047.
21. Shoaib RM, Najeeb T, Muzaffer TF. Knowledge of Depressive Illness among Non- Psychiatrist Doctors. *J Bahria Univ Med Dent Coll.* 2021 Mar 15;7(4):205–8.
22. Huang WL, Chang SS, Wu SC, Liao SC. Population-based prevalence of somatic symptom disorder and comorbid depression and anxiety in Taiwan. *Asian J Psychiatr.* 2023;79: 103382
23. Meneo D, Samea F, Tahmasian M, Baglioni C. The emotional component of insomnia disorder: A focus on emotion regulation and affect dynamics in relation to sleep quality and insomnia. *J Sleep Res.* 2023;32(6): e13983